



THE CAVALRY LANCE

ALAN LARSEN & HENRY YALLOP





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Series Editor Martin Pegler

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INTRODUCTION

Throughout history the lance has been the quintessential cavalry shock weapon. Following the adoption of the stirrup, the lance dominated European mounted warfare between the 11th and 16th centuries. Military elites trained from childhood were schooled in the use of lances in excess of 13ft in length. Couched under the arm, and from the late 14th century stabilized on a lance rest affixed to the user's breastplate to spread the shock of impact, these huge weapons were solely intended to transmit the power of a charging armoured horseman into a target through the point of the lance.

With the development of practical cavalry firearms in the 16th century and the widespread disappearance of armour from the European battlefield by 1650 the lance became marginalized, however. The training and skill necessary to use the weapon was by the 17th century generally only used at tilts, events that were a sport in their own right and which bore little resemblance to the changed reality of warfare.

The lance never went away completely, however, and by 1800 it was back, much changed from its medieval and Renaissance namesake, and in use by the majority of European armies. During the next century the use of the lance spread to almost every Western military and it was employed all over the world. It saw action in wars on mainland Europe between major powers, in civil conflicts and wars of freedom, and also in the far-flung corners of empire.

Throughout a period of rapid advances in weapons technology, this seemingly most simple of weapons became increasingly popular. The lance was continually modified and there was much debate about how best to make use of this 'queen of weapons', right into the 20th century. Were the weapon's strengths enough to offset its weaknesses? Was the lance suitable for use by regular cavalry, men not born in the saddle or trained in the lance's use since childhood? The evidence was almost as varied as opinions on the subject, but it was not until the disappearance of the mounted warrior from the battlefield that the lance was finally consigned to history.

OPPOSITE

Austrian Uhlán of the 1st Regiment, 1798. These troops, recruited from Polish provinces, were men who considered the lance a 'national' weapon. (Anne S.K. Brown Collection, Brown University Library)

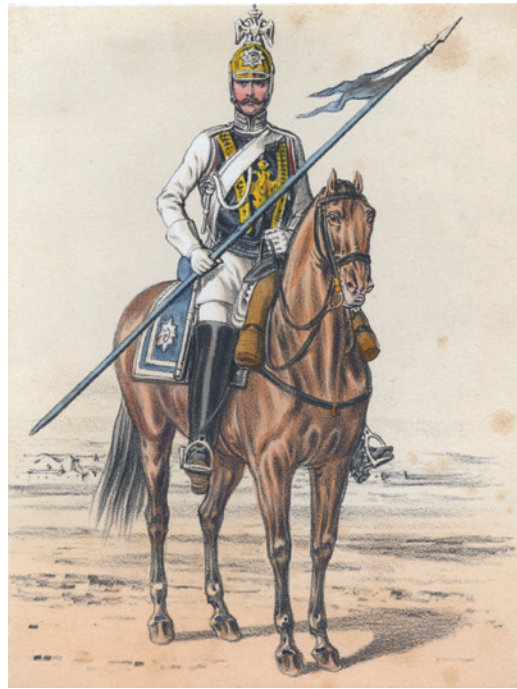




DEVELOPMENT

The rise of the lance

Lances of the various armies of the world took a variety of forms and used a range of materials at different times between 1800 and 1918. In addition, before the adoption of standardized patterns of lance and machine mass-production, there was a degree of variation in lances of even supposedly the same type. Furthermore, lances that used natural materials, such as wood and bamboo, continued to have a degree of variance in size even into the 20th century. Some general comments can be made about the weapon's development by professional armies, however. The earliest military lances of the modern age, such as those of Polish troops in foreign service during the 18th century, often only measured some 7–8ft in length, making it a light and relatively wieldy weapon, especially in the skilled hands of those for whom it was a national weapon. Yet when adopted by other militaries, the lance rapidly increased in length, to an average of 9ft by the Napoleonic period. Nor did this represent the end of the lance's growth, with examples for certain troop types reaching in excess of 11ft in Russia by the mid-19th century, and with many countries having settled on a single standardized pattern of about 10ft or so by 1900. Earlier lances' hafts were invariably wood, with ash remaining popular throughout the period. By the mid-19th century, 'male/solid' bamboo was also being used by countries that had colonial resources, but stocks could never meet demand and wooden hafts were never completely replaced even in the best-supplied militaries. Many nations' final patterns of lance were entirely constructed of metal. When combined with the increases in length and weight of the weapon over its service life, this meant that in many armies the kind of lances that were widely withdrawn from service in the first quarter of the 20th century were really very different from those that had been widely adopted over a century before. The better to understand the development and variations of this weapon over time, lances of a range of countries must be considered.



RUSSIAN LANCES

The Russian military made extensive use of the lance, but had no formally regulated patterns until the 1840s. This was in spite of increasing numbers of different types of Russian cavalry being equipped with the weapon from 1800. Before this date the lance had not been a weapon of the regular cavalry, but of the Cossacks. From 1801 the lance was issued to the front rank of the Polish and Lithuanian regiments. As new Uhlan regiments were raised or converted the lance was, depending on the regiment, issued instead of carbines to either the front rank or to all troopers. In 1812, lances were also issued to Hussar regiments, and in the 1830s the lance became no longer just a weapon for the light cavalry, as even heavy regiments received an issue. In 1831, the front rank of all Cuirassier regiments were issued with the weapon, which was followed in 1833 by this issue being expanded to include two squadrons in all but one of Russia's Dragoon regiments. Although the lances of the regular cavalry were yet to be standardized, most were between 9ft 2in and 9ft 4in in length.

The lance was primarily the weapon of the Cossack units. Such lances came in a great variety of types and sizes, but usually lacked both langets and shoe. Having faced Cossacks in 1812, the French cavalry officer Jean Baptiste Antoine Marcellin de Marbot (1782–1854) repeatedly claimed that some Cossack lances were as much as 14ft long, and while this seems perhaps excessive, it is likely that at least some of these unregulated weapons were noticeably longer than those weapons carried by most regular lancers in the Napoleonic period. Certainly some contemporary illustrations show such weapons as unusually long. In addition, in his 1824 work *Ueber den Kosaken, und dessen Brauchbarkeit im Felde* (On

ABOVE LEFT

Russia had her own source of troops who were well schooled in the use of the lance: the Cossacks, who in 1812 numbered over 100 regiments. This is a Cossack of the Lifeguard Cossacks, 1814. Note the great length of his lance and the absence of a shoe. The lance head is of similar form to the first standardized Cossack lance of 1839 (see page 13). (Anne S.K. Brown Collection, Brown University Library)

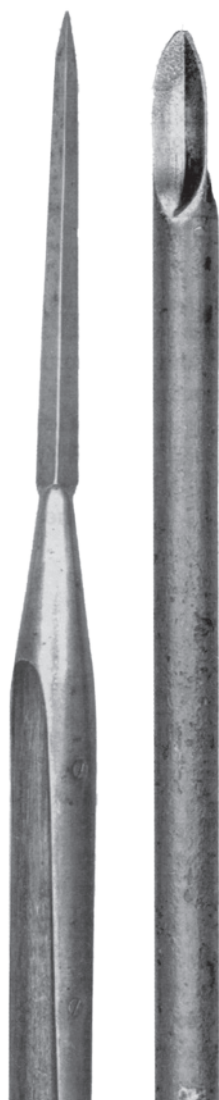
ABOVE RIGHT

Russian Cuirassier, 1845. Russia was the first country in the modern period to equip armoured cavalry with the lance. The lance shown is probably an indistinct rendering of the longer cuirassier's version of the Pattern 1843. In reality the blade and cone socket were both less tapered. (Anne S.K. Brown Collection, Brown University Library)



A Russian Pattern 1843 lance.
(© Museum of Artillery,
Engineers and Signals,
St Petersburg)

Russian Pattern 1862 (left) and
Pattern 1910 lances. (© Museum
of Artillery, Engineers and
Signals, St Petersburg)



the Cossack and his Usefulness in the Field), the Austrian soldier Anton Prokesch von Osten (1795–1876) states that the Cossack lance was 1ft 6in longer than the Polish weapon. The likelihood that the Cossack lance was longer during this unregulated period is further suggested by the fact that when Russia began the process of standardizing Cossack lances the first official pattern, the Pattern 1839 (see page 13), was 11ft 2in. This was considerably longer than the first pattern for regular cavalry, the Pattern 1843, with the version for heavy cavalry measuring 10ft 6in and that for light cavalry 9ft 4in. Both these patterns shared a quite broad tapering blade of flattened diamond section, secured by a tapering cone-shaped socket to a wooden haft, although the head of the Cossack pattern was slightly smaller, and it had no shoe.

The next Russian pattern of lance for the regular cavalry was approved in 1862, and at 9ft was of significantly reduced length. Again, some variation existed in models for the light and heavy cavalry, with the latter being provided a version with a lead-filled shoe. The increased weight would have altered the point of balance, enabling the lance to be held further towards the shoe and increasing the weapon's effective reach at the cost of the added weight. This was not the only change, however, as the Pattern 1862 lance had a drastically changed head, being of long, narrow, slightly tapering square section, rather than the broad, flattened diamond section of its predecessors, enabling the Pattern 1862 to penetrate further for the same amount of energy exerted through it. Although this weapon remained in Russian service until 1913, its use was significantly reduced in 1882–83 when both Hussar and Uhlan regiments were converted to Dragoons and the lance withdrawn from their equipage, being kept only by the front ranks of the Cossacks, Guard Cuirassiers and Guard Uhlans. In 1901 the Cossacks received a new 10ft 2in lance, with a haft of painted wood or bamboo.

This partial rejection of the lance by the Russian military was not to last, however, as in 1910 a new pattern of all-steel construction was approved; the short cruciform head was integral to the haft and of equal width to it. While extremely robust, this must have made penetration difficult with anything other than a couched attack. Perhaps not surprisingly, the new weapon was at 10ft 9in of an increased length suited to this kind of use. Introduced into service in 1913, the Pattern 1910 was issued to the front ranks of all Russian cavalry units, both Dragoons (the only remaining type of Russian regular cavalry) and Cossacks, until the 1930s.

FRENCH LANCES

The first standardized French military lance, the Model 1807 (see page 13), was in fact not intended for use by Frenchmen, but by Poles in French service. The head had a long, flat blade of diamond section, measuring 10in and attached to the haft by a short socket and a long pair of langets. The haft was of straight-grain ash or walnut blackened with iron oxide. The most distinctive feature of the weapon is a small ball at the neck of the blade, to prevent over-penetration. A simple metal shoe, riveted in place to the shaft, completed the weapon, which measured 9ft 2in in total. The Model 1807 lance was also issued to the 2nd Regiment of Light Horse Lancers of the Imperial Guard in 1810.

Before the invasion of Russia in 1812, France formed nine regiments of Line Lancers, and these troops were issued with a new lance: the Model 1812. Although slightly shorter than the Model 1807 at 9ft, the weapon's balance point was 42in from the end of the shoe, meaning about two-thirds of the weapon was in front of the hand, thus providing greater reach than the Model 1807. Even so, the Model 1812 could still be extremely heavy, with some examples weighing as much as 7lb 4oz. As such, Colonel Antoine Fortuné de Brack (1789–1850), the experienced Napoleonic cavalry officer and later commander of the French Cavalry School, wrote that the lancer should always keep the lance braced against the side of the body and cup the lance with the palm underneath the haft, lest the heavy, thick weapon be knocked from the hand. Further to guard against this he also stated that the lancer should confine himself to the basic front and side points, and not attempt to use the weapon for the more dexterous motions prescribed in the 1811 Exercises, *Règlement Portant Instruction sur l'Exercice et les Manoeuvres de la Lance*, for which he reasoned the weapon was too heavy.

Such criticisms led to the development of a new lance, the Model 1816. Despite the trials of shorter, lighter weapons, the new lance was 9ft 2in. The blade length was reduced fractionally to 7 $\frac{7}{8}$ in, but underwent a much more drastic change in form. It was now triangular, narrower and deeply hollow-ground with the langets integral to the socket, rather than separate as on previous models. The means for attaching the pennant also changed from round eyelets to rectangular openings. The Model 1816 did not last, however, as it was felt that short langets with only four screws securing the head were an area of weakness. It was soon replaced by the Model 1823, which remedied this deficiency by having longer langets with additional screws embedded in the haft, rather than sitting proud of it.

From the third quarter of the 19th century the preferred material for lance hafts in some armies became 'male/solid' bamboo, as it combined strength with flexibility. The French were slow to follow this trend, however, in part because they withdrew the lance from service during this period. As a consequence, bamboo-shafted lances were not introduced

The French Model 1812 lance. At 8 $\frac{1}{4}$ in the blade was smaller than that of the earlier Model 1807 lance and was deeply hollow-ground, but still secured to the haft by long langets. Eyelets protruding from the langets were a new feature to secure the pennon, which in the Model 1807 was simply tied around the haft. The Model 1812 lacked the ball 'stop' of the Model 1807, however, meaning these protrusions could have become caught in a target. (© Royal Armouries VII.2860)





A French Model 1823 lance. The length of the blade was again reduced, to 5in, but it retained the triangular hollow-ground form. Perhaps the greatest changes came in the haft. The material was now always ash and although of the same length as the Model 1816, the Model 1823 was carefully constructed to balance a mere 39in from the shoe, giving an effective reach of almost 72in. In addition, it was also a more manageable weight, at 5lb 5oz. (© Royal Armouries VII.712)

into French service until 1890. Although the most immediately noticeable difference in the Model 1890 lance was the material of the haft, this was also the first French lance in which all metal parts were produced in steel. This, and a much-altered blade form, meant that the Model 1890 represented a total change to its predecessor, the Model 1823, designed more than 60 years earlier.

The new blade form was quadrangular and hollow-ground, fixed to the haft by an extended socket rather than langets. The blade was secured by first being screwed into the socket, and then pinned and riveted. Below the blade of only 6in was a disc 'stop', although its small size meant its effectiveness in preventing over-penetration can be questioned. The shoe was also a departure from previous French lances, being more tapered and having a pronounced lip as on contemporary British lances. This would have aided the standing of the lance in the ground when not in use, as well as potentially making strikes with the butt end of the lance more effective.

The main problem with the Model 1890 lay not so much in its design, but its production. Like Britain, France struggled to secure enough 'male/solid' bamboo of consistent quality to equip her troops. Hence the all-steel Model 1913 lance was introduced. Both the Model 1890 and Model 1913 were longer than earlier models at 9ft 6in and 9ft 9¼in respectively and had a similar shoe, but here the similarities ended. The blade of the Model 1913 was triangular rather than quadrangular and at 4¾in was even shorter than the blade of the Model 1890, although both were hollow-ground. The disc 'stop' on the Model 1913 was even less substantial than that on the Model 1890 and it also housed the pennon attachment. A leather sleeve covered the central section of the Model 1913 to serve as a grip, and an integral rectangular ring provided a means of securing the lance sling. Even so, this means of attachment – along with the cowhide holder fixed to the right stirrup for the lance shoe to sit in – was not secure enough to prevent the rattling which led to the 10th Cavalry Division becoming nicknamed 'the upholsterers' on account of the clanking made by their metal lance shafts when they cantered, sounding like the noise of curtain rods.

A French Model 1913 lance, made at the Châtelleraut arms factory, 1914. The weapon saw some use in the early stages of World War I as cavalry clashes dominated the early weeks of the conflict, one of which saw Prince Henry of Saxony wounded by the lance of a French Dragoon at Gondrexon on 13 August 1914. As cavalry and lances saw less opportunity for action, however, this last model of French lance was quickly relegated to use as command flags or for ceremonial duties. (© Royal Armouries PR.1663)

With the outbreak of war so soon after the development of the Model 1913, both this lance and the Model 1890 were in service during World War I. Dragoons of the 10th, 15th, 19th, 20th, 24th and 25th regiments retained the Model 1890, whereas the other 26 regiments were issued with the new Model 1913. Those regiments of Hussars (the 2nd, 3rd, 4th, 8th, 11th and 12th) and Chasseurs à Cheval (the 13th, 14th, 15th, 17th and 18th) that were issued with lances all carried the new steel model.





GERMAN LANCES

Many of the various states and kingdoms that would later form a unified Germany fielded lance-armed cavalry from 1800, and use of the weapon by German cavalry steadily grew during the 19th century. Some of these states even had standardized regulation lance patterns in the early years of the century. In the case of the Kingdom of Saxony, early standardized lance patterns coincided with the kingdom providing troops for Napoleon's Grande Armée, with the Prince Clemens Regiment of Chevauxlegers being equipped with lances made of pine for the invasion of Russia. These were replaced a year later with the models made from ash. A new pattern, the Model 1815, was introduced once the Napoleonic Wars were over and Saxony joined the German Confederation. Officially designated Uhlans did not appear in the Saxon Army until 1867, however, when two regiments were formed, both equipped with the same model of ash-hafted weapon, only for it to be changed again to pine in 1889.

By contrast, Bavaria fielded no lance-armed troops while contributing soldiers to the Grande Armée, but on 29 August 1813 raised a regiment of Uhlans to fight against the French during the Wars of Liberation (1813–14). The Uhlans were equipped with a 10ft 6in lance with a 9in hollow-ground diamond-section blade and flat, ring-shaped 'stop'; the long langets contained three round eyelets in line with the plane of the blade for the attachment of a pennon. This weapon remained in service until 1822 when Bavaria disbanded her Uhlans, only to raise two more regiments in 1863 and issue them new models of lance two years later (see page 13). This new lance, the Model 1864, had a haft of beech, was much reduced in length at 8ft 7½in and weighed between 4lb 2½oz and 4lb 10oz. The form of the head was also changed, as although having a blade of similar length at 7¾in, the new form was almost parallel-sided and tapered very gradually to a strong point. The most significant changes, however, were the very pronounced medial ridge to add strength along the central axis of the blade, and the 'stop' of flattened-ball form where the socket met the haft to prevent over-penetration. A Mk I and Mk II of this model were produced, the difference being the reduction in the number of eyelets for pennon attachment, from five to three.

Württemberg did not possess Uhlans until after German unification when two regiments were converted, some of which carried French lances captured in the Franco-Prussian War (1870–71). Prussia, by contrast, had numerous lance-armed cavalry regiments and by the mid-19th century had standardized patterns. The Prussian Model 1856 lance had a short, narrow

A Saxon Model 1815 lance.
(© Museum of Artillery,
Engineers and Signals,
St Petersburg)

A Prussian Model 1856 lance.
(© Museum of Artillery,
Engineers and Signals,
St Petersburg)





A Prussian Model 1869 lance.
(© Museum of Artillery,
Engineers and Signals,
St Petersburg)

Butt (left) and head (right) of a
German Model 1890/93 lance.
From 1893, Model 1890 lances
were modified by replacing the
six wire pennon eyelets with four
round studs. (© Royal Armouries
VII.1647)



blade of square section, a form that was repeated in the slightly larger Model 1869 lance. The blade was slightly increased to 5in, with the total length being 10ft 3½in, giving a weight of about 4lb 8oz. This lance had a haft of pine or spruce, and six wire pennon eyelets that were affixed directly to the wood. The weapon was also adopted by the Württemberg and Bavarian Uhlans after German unification, when the other states of the new German Empire agreed to conform to Prussian military regulations.

It was Prussia, following her success in unifying Germany (after defeating first Austria and then France), that did most to promote the lance as a weapon in Germany. In addition to taking control of the new Imperial German Army and converting some cavalry regiments of the smaller states to Uhlans, the Prussian-led reforms effectively converted all German cavalry to Uhlans.

Until 1889 the lance was only carried by Germany's regiments of Uhlans. From that year on, however, the lance was issued as part of a standardization of equipment and drill based on a rationalization of Germany's cavalry to be of a unified type and multifunctional (*Einheitskavallerie*), making the lance the primary mounted weapon of the German cavalry. This new primacy of the lance was followed in 1890 by an entirely new weapon, issued to all German cavalry apart from the Saxon regiments who retained the old pine model. The Model 1890 lance was made entirely of steel, with a square-section blade and wire pennon eyelets. A new, slightly altered, model was introduced in 1893, of the same general form and materials, with the haft entirely of drawn, soft steel; the blade of 5in was slightly longer and thicker, the whole lance measuring 10ft 3½in and weighing 4lb 11oz. The pennon eyelets on the new model were brass and much more substantial, and a hemp grip was added to cover the haft's central section, around which the ubiquitous leather sling was attached. It was this Model 1893 lance which was used by all German cavalry that were not redeployed as infantry during World War I and, from 1915 when swords were beginning to be withdrawn from field use, became these troops' only weapon of mounted shock action.

Lance patterns in context (opposite)

Six representative lance patterns are shown in this plate: the French Model 1807 (1); the Danish Model 1816 (2); the Russian Cossack Pattern 1839 (3); the Bavarian Model 1864 Mk II (4); the Indian Pattern 1868 (5); and the Italian Model 1900 (6).





A British Pattern 1816 lance.
(© Royal Armouries VII.1890)

BRITISH LANCES

Although Britain was one of the last major powers to adopt the lance, there is a degree of uncertainty over the weapon first used when she converted four regiments of Light Dragoons (the 9th, 12th, 16th and 23rd) to her first Lancer regiments on 19 September 1816. Before the lance was formally adopted, various experiments in its use were undertaken by the British military. During one such exercise on 20 April 1816, the men of the 9th Light Dragoons were reported in *The Sun* newspaper as carrying 'a lance 16 feet long' (quoted in Linney 1990: 98). Despite the quite detailed description of the event, this length seems difficult to believe, as it would have made the lances the length of some of the longest infantry pikes of the 17th century. Regimental histories occasionally refer to the very early 16ft lance as an experiment, no doubt all drawing upon the same newspaper report of the event, and on the occasions that the 16ft lance is mentioned it is dismissed as a short-lived prototype. Certainly, if such a weapon did ever exist it was soon found to be unsuitable, and a more practical weapon was introduced.

This Pattern 1816 lance, along with the next three British patterns, was identified by Charles ffoulkes at the Tower of London Armouries (now called the Royal Armouries), and corresponds to Colonel Henry Graham's description of the first lance issued to the 16th Light Dragoons in 1816. Numerous examples still survive at the Royal Armouries, many of which are marked to the 12th Lancers. These weapons are of the more manageable length of 9ft 5in, with an ash haft, and weigh about 3lb 13oz with a 6½in tapering leaf-shaped blade with slight medial ridge. The blade is attached by a short socket and langets of 16in, secured by three hoops that have raised, flat-topped domes for the attachment of the pennon. A slim cone-shaped shoe of 6in is screwed in place by short langets. With its large head, small shoe and parallel-sided haft, the Pattern 1816 lance has a point of balance that is fairly central, meaning that despite the weapon's length the reach in front of the user's hand when held at the balance point is only about 58in.

The Pattern 1816 was replaced in 1820 with a much-changed design, although the materials and shape of the haft remained the same. The length was reduced to 9ft 1in and the new blade was deeply hollow-ground, giving it a cruciform section, and parallel-sided for most of its 8½in length. At the base of the blade's neck was a flattened metal ball, intended to prevent over-penetration. The langets remained the same, of equal length, but no longer had the reinforcing hoops, and the pennon attachments were now round. The shoe remained unchanged. The

A British Pattern 1820 lance.
(© Royal Armouries VII.1245)





increased size of the blade and addition of the metal ball ‘stop’ meant, however, that the lance was both heavier, at about 4lb 7oz, and had a centre of balance even further forward than that of its predecessor – approximately 53in from the blade’s tip.

A British Pattern 1840 lance (above) and a British Pattern 1846 lance (below). (© Royal Armouries VII.3581 and VII.678)

The Pattern 1820 lance was presumably found to be unsatisfactory as in 1827 a committee was formed to decide upon a replacement weapon. It may have been that the Pattern 1820, with its ball ‘stop’, proved unstable when carried in the stirrup bucket as this lance, the only British pattern to have a ‘stop’, was temporarily issued with a wooden ball that was to be affixed to the point to prevent accidents. Whether this, and the weapon’s general lack of balance, contributed to its abandonment or not, the committee examined a French lance that General Alexander Cavalié Mercer – in 1815 a second captain in the Royal Horse Artillery – had brought from the field of Waterloo. Puzzlingly, however, the next pattern of British lance, the Pattern 1840, bore no resemblance to any French lance that would have been at Waterloo. Instead, it resembled a much-shortened 17th-century infantry pike. The overall length again remained unchanged at 9ft 1in, but the ash haft was now slightly tapered. This, combined with an extremely small 3½in blade, and a larger, flanged and weighted shoe meant that the Pattern 1840 had a point of balance approximately 65in from the tip, giving it a theoretically increased reach. In addition to the increased reach the weapon was also lighter, weighing about 3lb 15oz. For a short period a ‘D’-shaped metal handguard was screwed to the haft at the balance point, but was soon discarded as it provided limited protection while restricting the user’s hand position to a fixed point on the haft. The final change was to the langets and pennon attachment. The langets were now asymmetrical, with the longest housing two key-shaped pennon slots.

A measuring gauge for the metal parts of a British Pattern 1860 lance from the Royal Small Arms Factory, Enfield. From the 1850s, lances became more uniform as military manufacturing became more standardized, centralized and precise. (© Royal Armouries)



By contrast it was the next pattern of British lance, the Pattern 1846, that bore a striking resemblance to the kind of lance most likely taken by Mercer from Waterloo and examined by the 1827 committee: the French Model 1812. The tapered head was 8½in, deeply hollow-ground and of cruciform section. The Pattern 1846’s asymmetrical langets had either the three ball-shaped pennon attachments of the French Model 1812 or the key-shaped slots of the Pattern 1840. The haft remained 9ft 1in and of ash, but lacked the degree of tapering of the Pattern 1840, and the shoe returned to a slender cone type, as on the much earlier French weapon. Although the Pattern 1846 was fractionally lighter, at about 3lb 13oz, the lighter shoe and lack of such a taper to the haft meant that the point of

A British Pattern 1860 lance. (© Royal Armouries PR.1662)





A British Mk III practice lance.
(© Royal Armouries PR.1616)

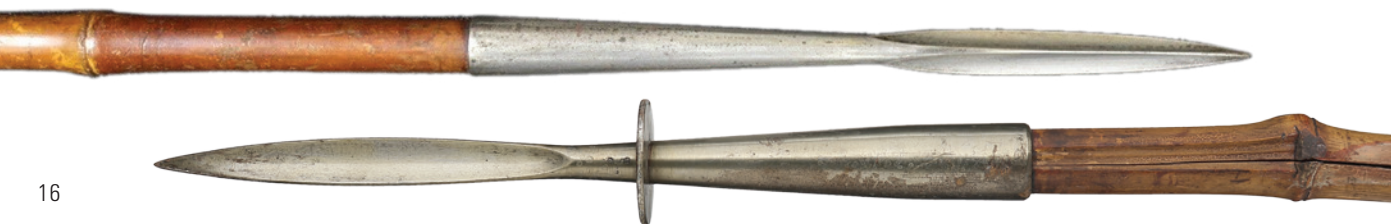
balance was further forward than on the Pattern 1840, at about 55in from the point.

The first British pattern of lance to be recorded in the War Office's Lists of Changes (begun in 1860) was the Pattern 1860. This lance set the form, but not size, of the blade for all subsequent British patterns. The blade, deeply hollow-ground and of triangular section, was 5in long. The asymmetrical langets and the key-slot pennon attachments were retained, and the larger flanged shoe of the Pattern 1840 returned. The total length remained 9ft 1in with a slightly increased weight of about 4lb 4oz, but once again the ash haft was tapered, which with the smaller head and heavier shoe took the point of balance to about 60in from the point.

From 1862, at least four types of practice lance – Mk I to Mk IV – were also approved, with various forms of haft. All had the head and shoe replaced with a round, flat plate attached to the haft by a short socket topped with a morocco leather pad stuffed with horse hair, and lashed to the plate by leather thonging. Some of these practice lances were sprung, whereby the haft retracted somewhat into the tubular metal grip portion upon impact with a target.

In 1868 the final blade size and form was fixed, being of the same shape and section as the Pattern 1860, but slightly longer at 5½in and proportionally broader. The shoe remained the same, but the haft material was changed to 'male/solid' bamboo. Because of the haft material, instead of using langets, the heads were shellacked in place. This 9ft lance was to remain in British service until the weapon was finally withdrawn from active service in 1927. The main reason subsequent patterns were necessary was due to problems in sourcing suitable bamboo, which had to be grown rather than worked. As such, a range of seven different head sizes and four shoe sizes were needed. These factors meant the weapon's weight ranged from as little as 3lb 3oz to 5lb 2½oz, although most were no heavier than their Pattern 1860 predecessors. The point of balance was intended to be 62in from the point. In 1883 a leather sleeve was approved for use with the bamboo haft, both to serve as a grip in addition to the ever-present buff leather sling, and to protect the haft from being damaged by the carbine butt protruding from the saddle bucket when the lance was

A British Pattern 1868 lance
(above) and an Indian lance of
about 1910 (below). (© Royal
Armouries VII.1249 and PR.1667)





British cavalrymen cleaning lances near Amiens, c.1916. Many of these lances have what appear to be disc 'stops' attached to the socket. Hitherto, British lances with such 'stops' were associated with Indian cavalry. Whether these lances are modified British Pattern 1868 lances, these British cavalrymen have adopted an Indian variant or they are servicing the weapons of their Indian comrades remains unclear. (Photo by Popperfoto/Getty Images)

slung on the lancer's arm. Issues with bamboo supply led to an identical lance (without the leather sleeve) to be approved in 1885, but with an ash haft, only to be declared obsolete two years later.

Despite the Pattern 1868 remaining in service, another wooden-hafted lance was approved, the Pattern 1894, once again with the same blade and shoe form. This returned to ash as the haft material and the pre-1868 length of 9ft 1in. Perhaps in response to the criticism that the short, shellacked socket left the head vulnerable to being cut off in combat, the socket was increased to 21in. Heavier, with a thick tapering haft and ranging in weight from 4lb 5oz to 5lb 11oz, the weapon had a point of balance about 63in from the point. The final change to British lances came in 1896 with the addition of a metal 'D' whipped to the haft so that the weapon could be attached to the saddle, but these were ordered removed in 1912.

Of course, lances were not only issued to British troops, but also to other soldiers in British service. For the most part the Indian troops in British service used British lances, or very similar patterns (see page 13). From the adoption of the weapon in the 1840s, however, there were some exceptions, with a distinctive variant of the Pattern 1868, with a large disc 'stop' being used by several regiments during World War I.

AMERICAN LANCES

Although the lance never became a standardized weapon of the regular US Army in North America, it did see some use. During the Revolutionary War (1775–83), lances were produced and at least issued by the American Board of War, as spears and lances were requested for units of Riflemen and Continental Light Horse. For the infantry they were issued in lieu of bayonets (many rifles of the period had no means for attaching a socket bayonet), and

Mexican lance head, c.1847.
(Courtesy West Point Museum
Collection, United States Military
Academy. © West Point Museum,
WPM 19724)



A lance made by Moll of
Allentown, Pennsylvania, for an
unidentified US unit. The head is
very similar to that of the British
Pattern 1860 lance. (Courtesy
West Point Museum Collection,
United States Military Academy.
© West Point Museum,
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as a rifle rest. The weapon for both horse and foot had iron langets, but the issue intended for the cavalry as a lance was to be made without the sling or shoe, both of which were essential features of later cavalry lances. Stranger still was the fact that the weapon was to be hinged so it could be folded in half, with a sliding band that would support the joint when fully extended. Presumably this was intended to ease carrying by infantrymen, but in reality it can only have made the weapon weaker and perhaps too fragile for cavalry use. This, and the fact that the weapon was only 7ft, perhaps suggests why there are no records of use of this type of lance during the war.

Perhaps the most numerous lances in North America were used *against* US soldiers rather than by them. During the Mexican–American War (1846–48), lances were employed by both the Mexican regular and irregular cavalry. Those of the regulars were not dissimilar to some of the forms used in Europe at this time. They had a wooden haft, with pairs of langets reinforcing the upper section and providing the basis for three eyelets, through which the pennon was attached. The blade was long, hollow-ground and of cruciform section, with a large ball ‘stop’ at the base of the blade. The weapons of the irregular Californios (residents of Spanish descent of California and New Mexico) in Mexican service were naturally less uniform. Produced locally, often by reusing scrap iron, the heads must have been of suspect temper. These blades were reportedly 9–10in long, and 1½in wide at the base. Unusually for a lance, but presumably for ease of construction, they were tanged rather than socketed, set into a haft of laurel or ash. Measuring about 6–8ft, these were fast, manoeuvrable weapons, but would have lacked the reach of military models and the same ability to stand up to shock use.

During the American Civil War (1861–65) a range of lances were used by both sides, often locally manufactured, and of varying types depending on the regiment they were intended for. Among the cavalry regiments of the Union that were at some time issued with lances (as opposed to the more numerous units that were lancers on paper but never carried the weapon), there were at least four patterns in use that have been identified. The vast majority of lances acquired by the Federal government during the war, 4,301 of the 4,567 that are recorded as paid for between 1861 and 1866, were not manufactured by the government but purchased through contracts. Those that were manufactured all appear to have come from the Benecia Arsenal in California, where 275 lances, slings, pennons and shoes were made. This Benecia-pattern lance had a broad, leaf-shaped head with gradual, straight tapering sides and a pronounced medial ridge. The head was attached by a narrow, tapering socket with langets, and had three round eyelets for the attachment of the pennon. Another pattern appears to have been made by W.H. Shaw of Detroit, for Rankin’s Lancers (1st Michigan Cavalry). Colonel Arthur Rankin ordered 800 of these weapons for his regiment, arriving in February 1862. Attached to the haft



US lance head of Rush's Lancers.
(Courtesy West Point Museum
Collection, United States Military
Academy. © West Point Museum,
WPM 15200)

by a short socket, the broad blade was of flattened diamond section and parallel-sided until the final third, where it gradually tapered to a point.

The famed Rush's Lancers (6th Pennsylvania Cavalry) carried at least two patterns of lance. The first issue lances were made under contract by Isaac Broome in December 1861, just a month after the regiment was converted to lancers at the request of Major General George B. McClellan, commander of the Army of the Potomac. Based on an Austrian model, this first pattern had an 11in blade of triangular section, and a 9ft haft of Norwegian fir terminating in a shoe and counterweight, presumably taking the centre of balance back to increase the weapon's effective reach. Although at 4lb 13oz this pattern was not particularly heavy compared to European models, Colonel Richard H. Rush suggested the following improvements in a letter of February 1863 to Brigadier General George Stoneman after drilling his regiment with the new weapon: 'By the use of hickory, the staff might be made lighter with equal strength, and the blade of the pattern of the bayonet would also decrease the weight' (quoted in Brown 1967: 107). It seems that at least some of these recommendations were implemented, as surviving examples of the regiment's lances have a unique blade of almost tubular form, rather like an apple corer, that can be found on some socket bayonets. Despite these modifications, Rush's Lancers handed in their lances in May 1863 to be issued with carbines instead, and no future pattern was produced for US military service.

The Confederacy also produced lances for its cavalry, but more out of desperation in an attempt to make good the South's serious shortfall in arms, just as pikes were produced for its infantry, than because of any military attachment to the weapon. Two common patterns are known, both with ash hafts and relatively short at only 8ft. The first had a blade of pointed oval shape and short socket. The other, of elongated pear shape, had a broad, thin and entirely flat blade and neck that also served as the tang; being inserted into the haft where it was further secured with a short socket with a small disc 'stop'.

US lance of Rush's Lancers.
(Courtesy West Point Museum
Collection, United States Military
Academy. © West Point Museum,
WPM 7762)



LANCES OF OTHER COUNTRIES

The lance entered service in almost every Western-influenced military at some point during the period under consideration, and in most cases remained in active use throughout, with the proportion of cavalry personnel armed with the weapon generally increasing as the 19th century progressed. The weapon was popular in South America, with Argentina importing lances from Germany for use by three of her nine cavalry regiments in the 1890s. The Ottoman Army, too, heavily influenced by German military reforms at the beginning of the 20th century, also imported German models of all-metal lances. Other countries looked to the weapons of countries that had established lancer regiments and standardized patterns of lance when seeking to equip their cavalry. Hence the French Model 1823 lance became the Swedish Model 1838 lance, although this was replaced by the Swedes' own longer Model 1851; 9ft 8in with a gradually tapering 8¼in blade of slightly hollow-ground, flattened diamond section. The Belgians, too, initially used French lances for their troops, first the Model 1812 and then the Model 1823, before adopting their own partly original weapon in 1896 for the four of their eight cavalry regiments that carried the lance. The Belgian Model 1896 lance borrowed the bamboo haft and head design directly from the British Pattern 1868, but had a longer cone-shaped shoe lacking either a lip or langets; at 9ft 4in, the Belgian weapon was some 3–4in longer.

Not all countries borrowed ideas in lance design from their neighbours or allies. Some, even for a very small complement of lancers, developed their own weapons. Despite only having two lancer regiments, Denmark developed two models of lance in the short period the weapon was in use with her military. The Model 1816 (see page 13) was 10ft long, with an ash haft and bowl-shaped 'stop'. This model was replaced in 1832 with a 9ft 9in weapon with a small ball at the neck of the blade's disc-shaped 'stop'. This final Danish lance was also carried by a small proportion of the Funen Light Dragoons, before the lance was withdrawn from Danish service in 1842 and Denmark's lancer regiments were disbanded.

By contrast, the Spanish fielded a large proportion of lancers, comprising well over one-third of their total cavalry strength up until the 1890s. This perhaps explains their constant revision of the weapon, issuing nine different models between 1815 and 1905. The first of these, the Model 1815, was unique among military lances in possessing the type of 'wings' similar to those found on Renaissance boar-spears, instead of the more common disc or ball 'stop'. The leaf-shaped blade was large at 9¼in, and of flattened diamond section with slightly hollow-ground faces. The large head of this weapon meant its point of balance was rather far forward, however, providing the user a mere 52in reach on a weapon of 9ft 4in. This large, heavy head was replaced in subsequent issues as the next three models (the Model 1834, Model 1835 and Model 1842) had unusually small diamond-sectioned heads, of a size and shape reminiscent of 17th-century infantry pikes, rather narrow and measuring between 5¾in and 7in. This small head, attached by a socket alone on the Model 1835 and with short langets on the Model 1834 and Model 1842, meant that despite an increase in length, weight was reduced by 5oz to

A Spanish Model 1815 lance.
(© Royal Armouries VII.548)





4lb 8oz – yet the point of balance meant the weapon's effective reach was as much as 70in. The small head was kept for the Model 1861, but at 8ft 2in this weapon was unusually short, although the proportion of reach afforded was in fact increased, no doubt due to extra weight being added at the shoe end. In 1882 this unique form of small-headed lance was finally abandoned by the Spanish military, and replaced with a deeply hollow-ground triangular head with a disc 'stop', and the weapon was again lengthened to 9ft 2in. The disc 'stop' was retained for the final Spanish lance, the Model 1905, though the new blade was tapered and of thick diamond section. Like so many lances of the beginning of the 20th century the Model 1905 was entirely metal, and at 9ft 10in and 4lb 15oz both longer and heavier than its predecessors.

A Spanish Model 1835 lance.
(© Royal Armouries VII.718)

In Italy, too, lancers accounted for a high proportion of cavalry, and certain states were producing standardized patterns of lance long before the country's unification. The Piedmontese Army, although having no

Italian Lancers, 1912. Despite the date, the men in the rear of the image appear to still be equipped with the Model 1860 rather than the Model 1900 lance. (Photo by Buyenlarge/Getty Images)



regiments designated as lancers, still fielded lance-armed cavalry and developed and produced the first standardized patterns of Italian military lance. The Model 1833/36 was quite a long, slender weapon, at 9ft 8in, with a narrow, tapering 5½in blade of thickened diamond section. The socketed head was secured to the blackened ash haft by asymmetrical langets, which on the side that did not have the three pennon attachments extended almost to the central portion where the sling was attached and the weapon gripped. The shoe was a narrow cone, with short langets of equal length, and like the head was attached to the haft with screws. This lance was modified in 1849, the second and final year of the First Italian War of Independence, by the addition of a 'stop' of slightly flattened ball form around the widest part of the socket.

In 1860, after the previous year's Second War of Italian Independence, the cavalry was reorganized, into three types. Italian lance-armed cavalry were for the first time formally designated as Lancers and accounted for six of the 17 Italian cavalry regiments. With their new name, the Italian Lancers received a new lance; the Model 1860. Of the same total length, the blade was also of the same general shape, but slightly broader, with a thicker neck and of marginally flatter diamond section than the previous model. The 'stop' was now a disc rather than a ball, and while the asymmetric langets were retained, the pennon eyelets now sat in line with the plane of the blade. An unusual, but short-lived, addition was the presence of a brass sheath with ball terminal for the blade. This was intended to be affixed for when the lance was used as a policing aid, to make the weapon less lethal. The proportion of Italian cavalry armed with the Model 1860 lance was increased to 50 per cent in 1871, as the now-unified Italian Army reverted to redesignating its cavalry regiments by regional name and number, with the first ten of her 20 regiments all carrying the weapon. The final Italian lance, the Model 1900, again followed the German lead in producing a longer weapon made entirely of steel with a short, thick blade (see page 13).

An exception to the increased use of the lance was Austria–Hungary, which by 1890 fielded Uhlans no longer equipped with their characteristic weapon. Yet before this time the Austro-Hungarians had developed their own standardized patterns. In 1858 Austro-Hungarian forces used a short lance very similar to the Bavarian Model 1864, with the same ball 'stop' and pronounced medial ridge (see page 13) – in all likelihood an Austro-Hungarian design which the smaller allied kingdom then adopted. Of more conventional length, the Model 1875 had a blade that was almost parallel-sided, having no neck where it joined the socket, only an extremely small disc 'stop' which must have been of limited use in preventing over-penetration.

An Austro-Hungarian Model 1875 lance. (© Museum of Artillery, Engineers and Signals, St Petersburg)





USE

The lance at war

THE FRENCH REVOLUTIONARY AND NAPOLEONIC WARS

It was during this period of over a quarter of a century of almost constant warfare that the lance, as a formal and standardized weapon of professional modern militaries, came of age. Although there had been sporadic use of the lance during the Silesian Wars (1740–42, 1744–45 and 1756–63) by regional units in both Prussian and Saxon service, the lance



Russian Cossacks with their long lances. (Photo by DeAgostini/Getty Images)

was only in use for limited periods in Central Europe, with those troops that came from areas thought to be naturally adept at its use.

This trend of the lance's employment being promoted by soldiers from countries where it was a national weapon continued, with the changing ownership of the Polish provinces being particularly important in spreading the weapon's use. In 1791, the Austrians formed their existing units of lance-armed Polish cavalry into their first official Uhlan regiment, the first of four they fielded during the Napoleonic Wars. The Prussians still had lance-armed cavalry of Bosnian and Polish heritage in the Towarczys Corps, a successor to the Bosniaks of Frederick the Great. During Prussia's extensive military reforms of 1806–07 this corps was divided into the first two Prussian Uhlan regiments; by 1815, the kingdom had one Guard and eight Line Uhlan regiments. In addition to these regular regiments, many of the militia Landwehr cavalry units raised for service against France in 1813–15 were also equipped with the lance.

Russia, which had her own lance-armed irregular cavalry, the Cossacks, also followed this example in establishing her first Uhlan regiments. In 1797 Russia raised Polish and Lithuanian light-horse units armed with the lance. These were joined in 1803 by the first official regiment of Uhlans. Over the next nine years the Polish and Lithuanian regiments were formally classified as Uhlans. Two more regiments were raised in addition to one Cossack and seven Dragoon regiments being converted, making a total of one Guard and 12 Line Uhlan regiments.

Even France, the military heavyweight of the age, was introduced to the lance by the Poles. The first lance-armed troops in French service during this period were formed in 1799, as part of the Polish Legions. In 1807 Napoleon raised another regiment, the Polish Light Horse of the Imperial Guard; originally they were not armed with their national weapon, but after the battle of Wagram (5–6 July 1809), where they defeated a unit of Austrian Uhlans by snatching up their opponents' lances and turning them against them, the regiment was re-equipped and redesignated as Lancers. In 1810 a second regiment of lancers was added to the Imperial Guard, this time being made up of Dutchmen. In 1812, in preparation for the invasion of Russia where the Grande Armée would face many lance-armed Cossacks, Napoleon created nine regiments of line lancers. Six of these were formed from French Dragoons, two were taken from the Polish Vistula Legion and the ninth was converted from the 30th Chasseurs à Cheval, a regiment mainly comprised of Germans.

These regiments enjoyed considerable success during the period, with the Polish lancers in French service becoming particularly celebrated. As part of the French Army of Italy at Trebbia (17–20 June 1799), the Polish lancers were the only cavalry to resist the Cossacks, and were part of the decisive French victory at Hohenlinden (3 December 1800). Although at Ivenes (24 March 1809) the lancers lost their standards and wagons, their success in combat against a vastly numerically superior force that had them trapped and surrounded enabled them to fight their way free, putting to flight several regiments of sword-armed Spanish cavalry. Soon after the same lancers effectively won the battle of Ciudad



FAR LEFT

French Lancer of the 2nd Regiment of Light Horse Lancers of the Line, by Joseph Bellangé (1800–66). (Joseph Bellangé/Wikimedia/Public Domain)

LEFT

Polish lancer, 1812–14, by Eugène Louis Lami (1800–90). (Anne S.K. Brown Collection, Brown University Library)

Real (27 March 1809), taking the crucial bridge, then outflanking and routing the Spanish infantry. At Ocaña (19 November 1809) the Polish lancers again enjoyed great success against a larger force of Spanish cavalry. Although beaten back in an indecisive clash with British heavy cavalry in the early stages of the battle of Albuera (16 May 1811), the lancers (with the 2nd Hussars) fared much better against the British infantry. Fewer than 600 Polish lancers destroyed three of the four regiments of Lieutenant-Colonel John Colborne's brigade, inflicting over 1,200 casualties on the unprepared infantry and capturing several colours, for the loss of 130 lancers.

Nor was the success of French Lancers limited to the Peninsular campaign or their Polish regiments. French lancers broke Prussian infantry squares (an infantry formation designed to provide no flank for cavalry to attack) at Dresden and Katzbach (26–27 August 1813) and inflicted heavy casualties on the British 42nd and 44th Foot at Quatre Bras (16 June 1815). Two days later at Waterloo, French Line Lancers enjoyed even greater success against both brigades of British heavy cavalry, playing a decisive role in turning back the British massed charge, and helping to destroy both brigades as effective forces during their retreat to the Allied lines.

France's adoption and successful use of the lance during the Napoleonic period spread the weapon's use in the hands of the troops fielded by her satellites and allies, and also prompted its adoption by her enemies. Even Britain, the only major power not to adopt the weapon before the wars' end, experimented with its use after facing the weapon in French hands in the Iberian Peninsula, and finally adopted it in 1816 after seeing the French use it so successfully at Genappe and Waterloo (17 and 18 June 1815). By the end of the Napoleonic period the lancer was a regular fixture in almost all European armies for the next century: the age of the lancer had arrived.

Early British lance drill

The origins of lance drills within the British Army were marked by dissension and controversy; appropriate enough, given the controversy that was to mark the use of the weapon itself. The decision to convert regiments of Light Dragoons to the new role was made in the immediate aftermath of the battle of Waterloo (18 June 1815), and 'the salutary experience of coming into contact with Napoleon's Lancers' (Chappell 1983: 13).

In 1816 two detachments from the 9th Light Dragoons were set to work at Pimlico and Hampton Court, to devise a British version of the lance exercises taught to the French Guard and Line Lancers, who had for their part been taught the same by Polish NCOs of the crack Vistula Legion. Following these trials, two systems were presented to the Duke of York for his approval and the simpler of the two systems, written by Captain John Godfrey Peters, utilizing three divisions of attack and defence, was chosen. This decision was not taken well by Lieutenant-Colonel R.H. De Montmorency of the 9th Light Dragoons, who upon his release from French custody in 1814 had presented a treatise to the Duke of York. This document outlined his observations of French lance drill training from his time in – seemingly not unpleasant – captivity.

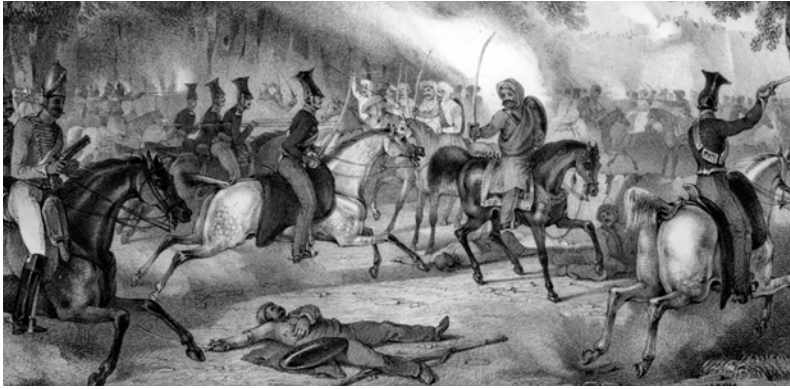
De Montmorency's dissatisfaction manifested itself in the publication in 1820, at his own expense, of *The Exercise and Manoeuvres of the Lance*. This tome, which runs to 149 pages, includes a vehement attack on the Pimlico Drills 'so universally found fault with' (De Montmorency 1820: 149), at that point already in official service for some four years. It is also enhanced by a somewhat superfluous account of various medieval banners including that of the De Montmorency family. (At that time the author was in the process of changing his family name from the rather less exciting Morres to De Montmorency, claiming descent from that august French family.)

Despite De Montmorency's efforts, *The Exercise and Manoeuvres of the Lance* – which required six separate Divisions of drill – was not adopted; the newly converted regiments apparently happy with the existing drill book. By 1865 the British Army Lance Drill had been reduced to two Divisions (against mounted and dismounted opponents respectively); by 1912 the Divisions had gone altogether, to be replaced by a simplified 'round the clock' system of five Points and Guards.

As an interesting aside, in Volume 1 of his highly respected *A History of the British Cavalry* (to which all students of British cavalry owe a serious debt), the Marquess of Anglesey does not mention Captain Peters at all and ascribes all to De Montmorency. Indeed, the legend of the captured British cavalry officer who first introduced Polish lance drills to the British Army is well established and repeated in many publications. It seems that De Montmorency may have had his victory in posterity, if not in Georgian Britain.



'Position of the Lancer Previous to Mounting', *The Exercise and Manoeuvres of the Lance*, 1820, by Lieutenant-Colonel R.H. De Montmorency. The first uniform of the regular British Lancers is accurately shown. Of note is the size of the *czapka*, more generally known in British service as the 'lance cap'. Its top-heaviness, height and subsequent tendency to part company with the wearer was addressed by the use of the attached 'caplines' which in theory allowed the recovery of the now battered lance cap – though not at speed and certainly not at the charge! (© Royal Armouries)



The first British use of the lance in action was by the 16th Lancers at the siege of Bhurtore on 10 December 1825. (Courtesy of The Queen's Royal Lancers Museum)

THE LANCE IN INDIA

The first use of the lance by one of the newly formed British Lancer regiments was at the siege of Bhurtore, India, in 1825–26. Here, men of the 16th (The Queen's) Regiment of (Light) Dragoons (Lancers) first deployed the new weapon against mounted Jat tribesmen on 10 December 1825. It is significant that the ongoing debate on the effectiveness of the lance, which was to last as long as the use of the lance itself, manifested itself here. An officer of the 16th Lancers who was present, stated 'The front rank using the lance, and the rear rank supporting with the sword [the lance being slung on the bridle arm] is a most formidable array and probably much more so than both ranks using the lance' (quoted in Anglesey 1973: 100).

The 16th Lancers were to spend 25 years in India – from 1821 through until 1846 – in a variety of stations. As well as the hardships and hazards of life in the Indian subcontinent, the officers and men of the regiment risked their lives in action in the bloody campaigns of the First Afghan War (1839–42) and the First Anglo-Sikh War (1845–46). It was their involvement in the latter conflict that saw perhaps the most successful cavalry charges conducted by British lance-armed troops, at Aliwal on 28 January 1846.

In short, 500 determined soldiers achieved what contemporary military thinkers considered almost impossible: the destruction by cavalry of well-trained infantry regiments in a defensive square formation. The feat could perhaps be compared to the success of the Vistula Lancers at Albuera in 1811. The success of the Poles was due in large part to their hidden approach under cover of a rain storm, however. This meant that their targets had no time to form square, and furthermore the rain rendered the muskets of the infantry inoperable. There was also a suggestion that the Polish cavalry had been mistaken by the British for Spanish allies.

The 16th Lancers at Aliwal had no such advantages. Their attack was made over open ground in perfect weather under the full weight of massed infantry volleys and cannon fire, straight into the steady ranks of the regular Sikh infantry, whose musketry was 'in the opinion of the survivors of the Peninsula and Waterloo ... both better delivered and aimed than that of the Napoleonic infantry' (quoted in Anglesey 1973: 100). Superb morale,

OVERLEAF

The 16th Lancers at Aliwal, 28 January 1846, by Henry Martens (1790–1868). This lithograph from 1847 correctly shows the lance being levelled by the front rank only, while the men of the second rank hold theirs at the 'carry' – except for one fellow who has neatly reversed his weapon to deal with a prone opponent. Gauntlets, normally worn to provide hand protection, are shown in use. (Anne S.K. Brown Collection, Brown University Library)





The 16th Lancers of 1846, recreated by The Troop for The Queen's Royal Lancers at Catterick Camp in 2009 for the 250th anniversary of the regiment. Note the trumpeter riding a white (or, correctly speaking, 'grey') horse – an innovation designed to distinguish the musician in the smoke and confusion of a *mêlée* as the troop attempted to rally upon his call. (Photograph courtesy of 16th Lancers Display Troop)



horsemanship and courage were responsible for the 16th Lancers' success. Whether the lance was integral to that success remains, as always, a point of controversy. On the eve of the Crimean War, serving cavalryman and author Captain Louis Edward Nolan wrote that 'a lance is useless in a melee – that the moment the lancer pulls up and the impulsive power is stopped, that instant the power of the lance is gone' (Nolan 1853: 75). Yet why were the 16th Lancers' charges against formed infantry at Aliwal (there were at least four separate charges at both squadron and regimental level) so universally successful? There seem to have been three specific reasons.

First, the morale effect of the line of lance points coming down together – of the first of the charges, delivered by Captain E.B. Bere's squadron, it was said by Corporal Edwin Cowtan that 'Our lances seemed to paralyse them altogether' (quoted in Graham 1912: 111). Second, in some cases the Sikh infantry, after having fired their last volley at the Lancers, seem to have taken to their shields and *tulwars* (curved swords or sabres), thereby effectively compromising their otherwise solid hedge of men and bayonets. On each occasion, however, the Lancers were able to maintain an ongoing momentum of a solid mass of men and horses, to punch their way through the infantry formation and out the other side. Third, and most importantly, complementing the courage of the men was that of their horses. On arrival in India, British cavalry regiments were issued locally bred or acquired horses, having left their horses at home on embarkation. In India, up until the middle of the 19th century, according to *A History of the British Cavalry*, these horses were normally stallions. As is well known, 'entire' horses are noted for their courage and aggression. It seems likely that this was instrumental in the 16th Lancers' ability to force their horses into the massed ranks of their opponents – a factor that appears not to have been picked up in previous analysis of the 16th Lancers' remarkable success. Not only were the mounts of the

16th Lancers brave, they were also hardy, able to continue on campaign on limited forage and water that would have left their British equivalents, quite literally, dead in their tracks.

One need only compare two contemporary statistics. On landing in the Crimea on 14 September 1854, the 17th Regiment of (Light) Dragoons (Lancers) – later the 17th (Duke of Cambridge's Own) Lancers – who had taken their British troop horses with them, had 237 horses (21 officers' and 216 other ranks'). A mere six weeks later, by the time of the battle of Balaclava, and having lost no mounts in action, they were reduced to 147 animals – a staggering loss of 38 per cent. By way of contrast, the 16th Lancers arrived at Aliwal with 20 officers and 510 men mounted after a 13-week ride of over 800 miles, having begun with 546 troop horses – a loss of only 7 per cent. In summary, the hardy stallions of the 16th Lancers not only delivered the men to the scene of the action with their numbers relatively undepleted but, having got them there, carried them without hesitation into and over the Sikh infantry, gunners and cavalry.

In our necessarily brief overview of the use of the lance in the Indian subcontinent we must also note the achievements of 'The Delhi Spearmen', a sobriquet apparently given by the Indian rebels to the 9th Lancers. The 9th (or Queen's Royal) Lancers served in India from 1841 onwards, participating in the First and Second Anglo-Sikh wars (1845–46 and 1848–49), the Indian Rebellion (1857) and the Second Anglo-Afghan War (1878–80). Their service in the Indian Rebellion alone garnered no fewer than 12 of the newly instituted Victoria Cross award. For their part the 12th (The Prince of Wales's) Royal Regiment of (Light) Dragoons (Lancers) – to give them their full title at the time – also served through the Rebellion, receiving the battle honour 'Central India'.

The 9th Lancers at Delhi, by Captain G.F. Atkinson, Bengal Engineers. This invaluable contemporary illustration depicts the 9th Lancers, armed with the Pattern 1846 lance, earning their sobriquet of 'The Delhi Spearmen'. The troopers wear white undress clothing and 'havelock' cap covers, though without the attached peak or visor against the sun which remained the prerogative of officers. (Photo by: Universal History Archive/UiG via Getty Images)



THE CRIMEAN WAR

Perhaps the single best-known cavalry charge in history was that of the ill-fated Light Brigade at Balaclava in the Crimea on 25 October 1854. In the front rank of the charge was probably the best-known of British Lancer regiments – the 17th (Duke of Cambridge's Own) Lancers.

The placement of the 'Death or Glory' boys as the 'Squadron of Direction' reflected their armament. The Pattern 1846 lance was used to great effect once the brigade had endured horrific casualties from Russian musketry and cannon; but how the lance itself was actually used at the guns is surprisingly little recorded in survivors' accounts. The extra length of the weapon meant that Russian gunners seeking refuge beneath their cannon were ruthlessly dispatched. The commanding officer of the Lancers at Balaclava was the sturdy figure of Captain William Morris – 'the pocket Hercules' who had charged with the 16th Lancers at Aliwal. Remarkably, he was also to survive this second bloody encounter, albeit with horrific wounds to his skull, and recovered to continue to serve with the 17th Lancers.

The combination of lance and sword could be very effective: 'Corporal John Penn left his lance in a gunner, equal lengths of the pole protruding from the front and back of the man's body, and next drew his sabre. He rode at a Cossack officer and with one swing of the blade virtually decapitated the man' (Brighton 2004: 144). Not all the men of the 17th Lancers discarded their lances – voluntarily or otherwise. It is notable that when Lieutenant-Colonel G.W. Mayow organized a group of survivors to fight their way out he placed those Lancers still fully armed in the front rank of the small party.

To continue our story we must return to the Indian subcontinent. In the aftermath of the 1857 siege of Delhi the 17th Lancers joined with veteran regiments, the 9th and 12th, to chase down the last of the remaining Rebellion forces. Tragically, Morris, who had survived so much action, was to die from heat stroke exacerbated by the sun's rays upon the silver plate that had held his skull together since October 1854.

A faithful recreation of the 17th Lancers in the Crimean War. Photographed in the North Valley, Balaclava, on 25 October 2004, on the 150th anniversary of the battle of Balaclava. (Image of the 17th Lancers Display Troop by courtesy of Richard Pohle)





The most famous musical instrument in Lancer – and possibly all military – history: the bugle that sounded the Charge of the Light Brigade. It was carried by Trumpeter Billy Brittain of the 17th Lancers, who was severely wounded in the action. The holes in the bugle were made by Cossack lance thrusts as the Russians attempted with their lances to retrieve the bugle from the downed Brittain as a trophy. In recent years the instrument has acquired a mixed red, blue and yellow 'Royal' cord. The 17th Lancers was not yet a Royal regiment in 1854, however, and as a cavalry regiment of the Line should by regulation have utilized plain green cords on both the bugle and the trumpet carried by its trumpeters. (Courtesy of The Queen's Royal Lancers Museum)

Balaclava, 1854: Private Pennington's escape (overleaf)

The extra reach given to its user meant that a well-trained lancer could – if deployed in suitable conditions – be extraordinarily effective on the battlefield. The effectiveness of the lance could vary enormously, however, depending on the confidence and determination of its user. An account from Private William Pennington of the 11th (Prince Albert's Own) Hussars underlines that to be effective the lance must be used in an aggressive fashion. Pennington's account makes it clear that a determined man armed with a sword – and wounded as he was – apparently had little to fear from the lances of the Russian Cossacks and Uhlans who attempted, in what does seem in some cases to have been a rather half-hearted fashion, to cut off the retreat of the Light Brigade: 'I galloped on, parrying with the determination of one who would not lose his life, breaking the lances of the cowards who attacked us in the proportion of three or four to one, occasionally catching one a slap across his teeth, and giving another the point in his arm or breast' (quoted in Brighton 2004: 165).

Here we see a moment in the retreat when Pennington had joined up with the 8th (Royal Irish) Hussars, who were retreating up the right-hand side of the valley in a cohesive body, along with survivors of the 17th Lancers and the 13th Light Dragoons. It seems that on this side of the valley the 10th Uhlans were engaged; Cossacks from the 53rd Don and 1st Ural regiments supporting the guns had initially fled, but some had rallied and pursued the British cavalrymen in search of loot or prisoners. With a musket ball through his right leg, Pennington was riding a grey horse as a replacement for his own Black Bess, shot dead immediately before the Russian artillery positions. His ensuing experience after his initial encounter with Russian Lancers is also worth quoting in that it gives another insight into sword versus lance at Balaclava. Pennington's account continues: 'I bore well to the left, quite losing touch with the 8th. Thus separated from all aid, Russian lancers pursued me up the valley, but I kept them on my right and rear, my sword arm free to sweep around. With many a feint at cut and thrust (for I feared to check the gallant grey) I kept them at arms' length, foiled their attempts to get on my left, where they might strike across my bridle hand, and the grey mare gradually drew ahead. Balls from the causeway ridge raised up the dust around my mare's hoofs, but happily their force was spent' (quoted in Brighton 2004: 176).





WARS IN NORTH AMERICA

By comparison with European and Asian conflicts, the lance played a marginal role as a military weapon in North America. This was in part due to the topography of the country, the nature of the armed forces, and the way in which war was waged there. The extensively wooded nature of large parts of North America made traditional cavalry, and especially the lance, of less import. The set-piece European-style battles where cavalry engaged *en masse* across relatively open areas that saw the lance return to prominence in the 19th century, never truly materialized in North America. Furthermore, the type of warfare, exemplified by Native Americans often making use of the landscape to employ guerrilla and hit-and-run tactics, meant there was seldom a formed enemy against which lance-armed cavalry could charge. Finally, the extremely small numbers of US cavalry, at least until the American Civil War (1861–65), meant it was not practical to raise as regular troops dedicated lancer units needing specialist training.

Lances were used in North America, however, especially against US troops by Mexican forces during the Mexican–American War (1846–48). Although at the battles of Monterrey (21–24 September 1846) and Sacramento River (28 February 1847) the Mexican lancers were repulsed, mainly by US artillery fire, before they could successfully come to grips with their enemies, this was not the case at the small-scale action of the battle of San Pasqual (6–7 December 1846). This resulted in the US forces of Brigadier General Stephen W. Kearny unsuccessfully engaging a force of lancers under the command of Major Andrés Pico. The advance party of the US 1st Dragoons made a premature and disorganized charge upon the lancers, who first received them with musketry, before feigning a retreat. Drawing the US troops on, the lancers then turned and engaged. In the skilled hands of the Californios, the lances did deadly work among the sword-armed Dragoons. Spread out, lacking cohesion and on blown horses or even mules, the US troops fell victim to lance thrusts as Pico's men were able to pick them off almost at will. US Dragoon Captain B.D. Moore fell, the victim of over a dozen lance thrusts, and almost every Dragoon involved in the charge suffered lance wounds, many of them fatal. Of the 50 US troops engaged, 21 were killed and 17 seriously wounded. Surrounded by lancers, the Dragoons were only saved when the rest of Kearny's force, including artillery support, arrived. Even then, and though outnumbered the lancers inflicted further casualties, with Kearney himself suffering a serious lance wound and Lieutenant A.H. Gillespie, leading the artillery and Volunteer support force, barely surviving lance wounds to the lung, chest, mouth and neck. Although the Mexicans' eventual withdrawal left the US troops in possession of the field due to their numerical superiority and artillery support, Pico's lancers had convincingly won the combat. They had shown what skilful lancers possessed of good horsemanship could achieve, not only in the charge but particularly in a looser, unformed action against enemy horsemen. Especially when facing troops on inferior or tired mounts, a good lancer could, using the superior reach of his weapon, engage a sword-armed opponent in close combat, all the while remaining out of reach to his adversary.



Perhaps influenced by facing the lance in the Mexican–American War, and also by the findings of military commissions sent to Europe, there were some calls for the lance to be taken up by the US cavalry. Yet it was only when larger numbers of cavalry were under arms during the Civil War that the weapon saw active field service with the militaries of North America. Even those few designated lancer units that ever received the weapon they were named after seldom used it in combat, however. Rush's Lancers (6th Pennsylvania Cavalry) were an exception, using their signature weapon in at least three engagements before having it replaced with the carbine in May 1863. First, at the battle of Gaine's Mill (27 June 1862) they were part of a unit of mixed Union cavalry that charged the Alabama Brigade – a charge accredited by eyewitnesses as being wholly the work of the Lancers, perhaps due to the singularity of their armament as much as its effect. On 7 September the same year, when near Frederick, Maryland, the regiment's Company A engaged a larger dismounted force of Confederate cavalry. Despite the enemy's significant numerical advantage, a swift charge by the Lancers overran the position, putting the Confederates to flight and securing some prisoners. The regiment's most famous use of the lance came some ten days later, however, at the battle of Antietam (17 September 1862). Here they were able to break the Confederates' hold over the crucial bridge across Antietam Creek that had resisted numerous Union infantry assaults. A full charge at the gallop dislodged the enemy's batteries.

The outcome of the only Confederate lancer charge of the war, by the lance-armed Company B of the 5th Texas Mounted Rifles at the battle of Valverde (20–21 February 1862), was not so successful, however. Completely checked with fire from the Colorado Volunteers, they suffered

Major Andrés Pico's lancers at the battle of San Pasqual (6–7 December 1846), by Colonel Charles Woodhouse. (Courtesy West Point Museum Collection, United States Military Academy. © West Point Museum)



Company I, Rush's Lancers
(6th Pennsylvania Cavalry) at
Falmouth, Virginia in 1863.
(Library of Congress)

casualties of almost 50 per cent of participants killed or wounded during the charge, and continued the battle dismounted with firearms.

In American warfare during the period cavalry were mostly used as mobile infantry, and as such would tend to fight dismounted with firearms. The lance was not a natural weapon for the landscape, the American cavalry soldier (many of whom were volunteers) or the type of warfare. Cavalry in North America were less a decisive battlefield force and of most use for reconnaissance and raiding, where the lance would prove more an encumbrance than useful weapon for the seldom-seen charge. As such, after the unsuccessful Stoneman's Raid (13 April–10 May 1863), even Rush's Lancers turned in their lances for carbines, removing the weapon from the American battlefield forever.

Stoneman's Raid, May 1863: Rush's Lancers under attack (opposite)

It was the unwieldiness of the lance in the close country of northern Virginia, notably during Stoneman's Raid, that led to its demise. According to Corporal Joseph Blaschek of the regiment, it was a 'decided nuisance in a wooded country' (Blaschek 1897) and 'ill adapted to cavalry service, as performed in the wooded country through which we were called to operate' (Gracey 1868: 155). The regiment itself seems to have had mixed views on its armament. The fillip given to *esprit de corps* by their unique and distinctive armament seems to have been offset by the unsporting tendency of Confederate marksmen to utilize the scarlet pennons as aiming points. In late May 1863 at Dumfries Camp, Virginia, the unit was re-equipped in its entirety with Sharps repeating carbines — the contrast in technologies could not have been greater.



THE WARS OF 1866

Although improvements in small arms and artillery saw most armies reduce their complements of cavalry, the lance was widely used by all the participants in these short-lived conflicts, with lancers making up a high proportion of the cavalry engaged. Most of the cavalry actions of the two wars were ill-judged failures, however, pitting lancers against lancers or combined lance- and sword-armed cavalry, so judging the weapon's effectiveness in use during these European conflicts proves problematic.

During the Austro-Prussian War, the Prussian cavalry of Generalmajor Karl Heinrich von Wnuck's cavalry brigade met Generalmajor Prince Solms-Braunfels' Austrian Cuirassier brigade at the battle of Náchod (27 June 1866). Charging *en echelon*, the Prussian 1st Uhlans engaged the enemy's front. Both lines were ruptured and a *mêlée* developed. The action was not decided by the charge of the lances, however, nor by the handiness of the Cuirassiers' sword in the *mêlée*, but by the supporting charge of the Prussian 8th Dragoons, which turned the Austrians' flank and soon put them to flight.

Shortly after, as part of a Prussian reconnaissance towards Miletín, the Prussian 3rd Guard Uhlans were confronted by the Austrian 8th Uhlans. Unable to form quickly enough to meet the Austrian advance, the Prussians launched a disordered charge which, despite being received by the Austrians with a volley from their muzzle-loading percussion pistols, still managed to penetrate the Austrian line. The ensuing combat of lancers against lancers lasted for approximately ten minutes, with both sides suffering in the region of 30 casualties.

The battle of Königgrätz (3 July 1866), although predominantly a clash of infantry and artillery, again saw lancers in action, with Uhlans amounting to about one-third of Austrian and Prussian cavalry on the field. Generalmajor Graf von Bismarck-Bohlen's combined cavalry brigade had mixed fortunes when attacking a battalion of Austrian infantry, already weakened by Prussian artillery. Although men of the Prussian 3rd Uhlans and 2nd Dragoons captured 70 skirmishers in their charge, the Austrian battalion stood firm, aided by the lie of the land, and repulsed the cavalry with musketry. It was the action of the Austrian cavalry that had the greatest effect in the battle, however, preventing the defeat of their army from becoming a rout. The massed attack of the Austrian 1st and 3rd Reserve Heavy Cavalry divisions, comprising eight regiments of Cuirassiers and four of Uhlans, halted the Prussian advance and bought precious time for the Austrian retreat, with the Austrian 11th Uhlans even winning through far enough to threaten the personal escort of the Prussian king, Wilhelm I. Such success came at great cost, however, with the Austrian cavalry suffering approximately 1,000 casualties. Some of these losses were to sword and lance as the Uhlans of both sides fought against each other, but many more were to fire from Prussian needle rifles and close-range artillery.

In the Third Italian War of Independence, the parallel conflict in the Italian theatre, perhaps the most famous cavalry charge of the two



conflicts not only involved lancers but again produced mixed results. At the battle of Custoza (24 June 1866) the heavily outnumbered Austrian forces achieved an unexpected victory over the Italians, thanks in part to the unforeseen effects of the ill-judged and costly charge of the Austrian 13th Uhlans. Their colonel, Maximilian Ritter von Rodakowski, led this regiment of Poles in Austrian service in a suicidal and unsanctioned charge against two full Italian infantry divisions. Drawn up into nine infantry squares and further protected by trees and drainage ditches, the Italians repulsed the charge with musketry before contact was made, resulting in the loss of almost half of Rodakowski's 600 men. Although neither a vindication nor a vilification of the lance as a weapon, the Uhlans being so disordered by musketry and the topography to engage the infantry properly before being forced back, the inadvertent morale effect of the charge was significant. Despite the Italian infantry standing firm and seeing off the Uhlans' charge, the attack engendered panic in the Italian baggage train that prevented reinforcements from reaching the field, leading to their retreat and subsequent loss of the battle. Rodakowski was later decorated for his part in the action, which, while a tactical failure, inadvertently showed that the morale shock cavalry and the lance could have on ill-disciplined troops could still be significant.

On 27 June 1866, lancers of both sides clashed at Oswiecim. The Prussian Landwehr Uhlans (right) were charged by the Austrian 1st Uhlans (left). The Austrian leader, Rittmeister Moritz Ritter von Lehmann, is shown being killed after attempting to cut down the Prussian commander, Major von Busse. A mêlée ensued and the Austrians were put to flight. After the war some debates at Britain's Royal United Services Institute ascribed the besting of Austrian lancers by Prussians to the longer lances of the latter. (Anne S.K. Brown Collection, Brown University Library)





PREVIOUS PAGES

The Genoa Cavalry charge at Custoza, by Giuseppe Gabani (1846–1900). The Italians are armed with the Italian Model 1860 lance with its disc 'stop'. (DEA / G. CIGOLINI)

THE FRANCO-PRUSSIAN WAR

Despite the lessons of the American Civil War and the wars of 1866 showing the importance of improvements in range, accuracy and rate of fire of firearms and artillery, the cavalry of both sides entered the Franco-Prussian War (1870–71) convinced of the continued battlefield importance of delivering the massed charge. France, despite attempts at reform, still kept a largely Napoleonic structure to her cavalry, with one regiment of Guard Lancers and eight Line Lancer regiments among her total of 66 cavalry regiments. By contrast, Prussia and her allied states fielded 23 Uhlan regiments, making up almost half of her total of regular cavalry. The Prussians also had a somewhat better grasp of the new role that cavalry had to play: one of reconnaissance in small groups and far-ranging patrols. The swift and ruthless Prussian Uhlan seemed able to appear unexpectedly beyond enemy lines, becoming something of a bogeyman to the French populace.

Yet cavalry of both sides suffered heavily on the battlefield in the face of improved weapons technology. Whether armed with sword or lance, armoured or light, cavalry often made little difference against improved firepower. At the battle of Mars-la-Tour (16 August 1870), lancers of both sides were heavily involved. Their varying fortunes showed they could still play a battlefield role, but they required increasingly careful handling and deployment to be successful. The French 3rd Lancers, in their attack on two battalions of German infantry, lacked any of the requirements necessary to make it a success in the age of industrialized warfare. The charge was poorly timed, ill-directed, lacked planning and was carried out to the front of steady infantry. These errors meant the lancers missed their targets, were halted by the nature of the terrain and driven off by organized fire with slight losses. Perversely, the nominally more successful charge of the French Guard Cuirassiers probably saved the 3rd Lancers on this occasion, who despite checking this minor Prussian advance were effectively destroyed in the process.

In cavalry-versus-cavalry combats, the results were often both less decisive and less deadly. Despite a combat involving 6,000 horsemen – including lancers of both sides – occurring when the Prussian 11th Cavalry Brigade charged, casualties were similar in number, with approximately 450 lost on each side. The Prussian 13th Uhlans, the only lance-armed Prussian troops in the combat, were heavily engaged but suffered comparatively few casualties, despite enduring over 100 carbine rounds from French Dragoons which had 'great effect' (Lehautcourt 1908: 1254). This suggests they fared well with their lances against the sword-armed French units they engaged in both the charge, and the subsequent mêlée that ensued for approximately ten minutes. And yet, the disproportionate losses of the lance-armed French unit in the action, the Lancers of the Guard, can be attributed to their uniform rather than weapons. Wearing their blue undress uniform rather than their familiar white and hence mistaken for Prussians, they were set upon by their own side as well as the enemy, losing twice as many as any other French unit in the action as a result.

The necessity to handle cavalry carefully, but use them boldly when the need arose lest they become completely redundant, was demonstrated



by the Prussians in the charge of the 12th Cavalry Brigade, known as ‘Von Bredow’s Death Ride’, involving the 16th Uhlans. Being tasked with attacking a force four times his brigade’s size and silencing the French batteries, Generalmajor Adalbert von Bredow grimly remarked ‘it will cost what it will’ (quoted in Wawro 2003: 156). Making use of the landscape to lead his brigade unobserved to within a few hundred yards of its objective, Bredow was able to take the batteries so swiftly that the French were only able to discharge two guns, their gunners quickly being put to lance and sword. A counter-charge of French Cuirassiers was successfully repulsed by the Prussian Uhlans, Cuirassiers and Dragoons. A rolling *mêlée* followed, in which any French infantry not panicked by the charge poured fire indiscriminately onto the cavalry of both sides. Yet even this tactically successful use of charging cavalry, which succeeded in overrunning artillery, cavalry and infantry, achieving its objective and returning in good order, did so at a heavy cost, with the three regiments of the Prussian brigade suffering 50 per cent casualties. Success with lance and sword against bullets and shell could still be achieved – but on the few occasions they occurred, such large-scale victories were becoming increasing Pyrrhic.

French and German forces clash at the battle of Mars-la-Tour, 16 August 1870. In a desperate action Prussian Uhlans and Cuirassiers of ‘Von Bredow’s Death Ride’ can be seen engaging French Dragoons and Cuirassiers around the French guns. (Anne S.K. Brown Collection, Brown University Library)

OVERLEAF

Prussian Uhlans attack French infantry during the Franco-Prussian War, by Christian Sell (1831–83). During and after the war the Prussian Uhlan was seen as the defining cavalryman of the conflict: able to range far and strike with deadly force. (Photo by Fine Art Photographic Library/Corbis via Getty Images)





LANCERS IN AFRICA

The service of the Victorian British cavalry in Africa was to see the lance at perhaps its most effective and also, arguably, at its most useless. From the triumph of Ulundi (4 July 1879) through to the very mixed experiences of the Second Anglo-Boer War (1899–1902), the final British patterns of lance were deployed against the Queen's enemies.

The first British deployment of the lance in Africa was by the 12th Lancers during the Basuto expedition and the Eighth Cape Frontier War (1851–52). Although the lance might be thought to have been an encumbrance in bush fighting, the regiment displayed the flexibility (after some mishaps) to devise a unique system:

the regiment received an issue of double-barrelled carbines for which their pouch belts had to be adapted to take a carbine swivel. In bush warfare it was the practice to arm part of the regiment only with these carbines while the remainder followed up with lance and pistol. Before sailing for the Cape, the 12th's Officers equipped themselves with the new Colt revolver, which had attracted much interest at the Great Exhibition of 1851. (Barthorp 1984: 122)

It was to be over 20 years before regular Lancers returned to Africa. In 1879 the 17th Lancers were sent to Africa in the wake of the disaster at iSandlwana (22 January 1879), arriving at Durban in April after a six-week journey. Their advance across Natal and into Zululand saw them undertaking some scouting duties in conjunction with locally raised mounted troops, the general idea being to preserve the valuable heavy English horses of the Lancers for shock action, as and when the opportunity arose. The undoubted bravery of the Zulu warriors notwithstanding, they were not generally in the business of offering themselves up as targets for the Lancers. An attempt by the regiment to close with Zulu skirmishers in the long grass and mealie fields at Erzungayan Hill on 5 June ended badly, with Lieutenant F.J.C. Frith shot dead as the unit failed – in any sense – to pin down the enemy. This also seems to have been the only occasion when the 17th Lancers employed their Martini-Henry carbines. The invaluable memoirs of Private Miles Gissop of the regiment tell us that 'half the men dismounted and started firing, the Zulus firing smartly in return' (quoted in Clammer 1980: 234).

This raises the subject of dismounted work by lance-armed troops. Upon conversion to lancers in 1823, the 17th Light Dragoons had their carbines withdrawn and only a single pistol was left to each man. Dismounted action was not considered an option for Lancers. The pistol was to be used for mounted picquet work, skirmishing or *in extremis* to dispose of a badly wounded horse. Gissop's description confirms that at Erzungayan Hill every other man held his colleague's horse when his colleague was dismounted and using his carbine.

In the years to come, dismounted work by sections of four Lancers – and the mounted work of leading the remaining three horses of a section (each horse having a lance attached) – was to become a well-practised



An engraving showing the charge of the 17th Lancers at Ulundi, 4 July 1879. This depicts the conventional view of the charge as presented in the newspapers at home. The supporting role of the skilled horsemen of the locally raised Frontier Light Horse is often overlooked and they are rarely illustrated in scenes of this action. (Photo by: Universal History Archive/UIG via Getty Images)

drill. We simply do not know how this was achieved in 1879, however, with respect to the lances of the dismounted men. Cavalry regulations give no indication as to how this was to be managed. The hard ground would not have allowed lances to be stuck into the earth butt-first to await the return of their owners. It may be that the Pattern 1868 bamboo lances were attached to the side of each dismounted man's horse – probably strapped, point up, to the front of the saddle by the 'cloak and wallet straps' on the luggage pouches or 'wallets'. Alternatively, the mounted horse-holder may have managed the dismounted man's lance by placing it in his near-side lance bucket and slinging it on his left arm.

Ulundi, 4 July 1879: the charge of the 17th Lancers (overleaf)

At Ulundi in 1879, Trooper Mossop of the Frontier Light Horse was an eyewitness to the charge of the 17th Lancers, who with 'tremendous shouts of "Death, Death"' charged the Zulu *impis*: 'On their great imported horses they sat bolt upright, their long lances held perfectly erect, the lance heads glittering in the sunshine. They formed into line. In one movement the lances dropped to the right side of the horses' necks, a long level of poles, stretching out a distance in front of the horses, the steel heads pointing straight at the mass of retreating Zulus' (quoted in Anglesey 1982: 203, 201).

Less than three months after their disembarkation at Durban, the 17th Lancers presented a notably campaign-worn appearance. Although 527 horses had been landed in April 1879, by 4 July the regiment was reduced to 260 mounted men. Private Miles Gissop's description of the appearance of the men is insightful: 'I don't know what people would have thought could they only have seen us with our clothes torn and patched, belts and saddles dirty, bits rusty, boots without blacking or grease, and so lamentable in appearance from the Regt which left England so clean and smart such a short time ago' (quoted in Knight 1988: 17). The 17th Lancers' opponents were comprised mainly of warriors of the iNdlondlo regiment, veterans who had fought at Rorke's Drift. Their courage in resisting an oncoming wall of men and horses was commendable.





The final cavalry charge at Ulundi represented a very effective conclusion to the campaign for the 'Death or Glory Boys'. Some hundreds of Zulu warriors were caught in the open and, whether standing defiantly or fleeing, were impaled or ridden over. Even in this moment of British triumph the classic weaknesses of the lance were apparent, however, when the impetus of the charge failed amid the long grass. Pushing aside the points of the now stationary lances with their shields, nimble Zulus were then able to stab either horse or rider with their *assegais* (short stabbing spears). It is apparent that there was little or no time to discard the now-useless lance and draw either the sword from its bouncing scabbard or the single-shot carbine from its bucket (assuming that the latter was loaded and ready to use). Officers, senior NCOs and trumpeters would have been better able to deal with their opponents, being equipped with either private-purchase or issue revolvers.

Six years later, the ongoing struggle with Mahdist forces in the Sudan saw two Lancer regiments, the 5th (Royal Irish) Lancers and the 9th Bengal Cavalry, taking part in the Suakin Expedition of 1884–85. The 9th Bengal Cavalry was an unlikely unit for the job, being converted to lancers only on arrival in the Sudan with instruction from NCOs of the 5th Lancers. Given the fanatical determination of their Arab opponents in hand-to-hand fighting, and the relative inexperience of both cavalry units, it is perhaps not surprising that the campaign – though a victory for the British forces – was not an overwhelming success for the two Lancer regiments, with heavy casualties incurred. Where the extra reach of the lance was to prove of value, was in impaling enemy swordsmen who dropped to the ground (which normally placed them below the reach of the rider's sword) with the intention of leaping up and slicing or 'hamstringing' the legs of the passing British cavalry horses.

The cavalry lance in British service did not return to Africa for nearly two decades. When it did, it was in the hands of the 21st Lancers – a much-maligned unit with a relatively undistinguished history at that point. Yet they were to gain undying fame at Omdurman on 2 September 1898.

The charge of the 21st Lancers was notable for a number of reasons. It was, surprisingly perhaps, the last full cavalry charge at regimental level undertaken by the British cavalry against a standing enemy. Thereafter, subsequent charges were all made at squadron level or against a retiring enemy. Secondly, the presence of the young Winston Churchill produced two things: a splendid account of proceedings (Churchill was doubling as a press correspondent for *The Morning Post*) and another medal on the chest of that relentless, but undoubtedly brave, self-publicist and glory hunter. Finally, in a remarkable twist of fate, one of the three Victoria Crosses won in this great Lancer charge was awarded to Lieutenant R.H. De Montmorency, a descendant of Lieutenant-Colonel R.H. De Montmorency who, in the early 19th century, had felt himself so maligned in his attempts to introduce the cavalry lance into the British Army.

Some 440 mounted men were drawn, whether by accident or design, into a trap in which they encountered some 2,300 determined Dervishes,



The charge of the 21st Lancers at Omdurman (2 September 1898) is depicted in this work by George Derville Rowlandson (1861–1928). Of the four British cavalry squadrons that entered the Knor, it was A and C squadrons which suffered the least casualties as a result of being able to maintain momentum. This was due to the relative shallowness of the ditch and a less densely packed enemy. The ghastly but effective Dervish tactic of 'hamstringing' the British cavalry mounts is evident here. (Courtesy of The Queen's Royal Lancers Museum)

rather than the 200 immediately visible. The Lancers were, however, able to fight their way through the ditch, through their opponents and out the other side. Some familiar strands emerge from this charge. The lance once again proved to be a mixed blessing in combat; it was of considerable advantage in the initial shock, but an encumbrance when momentum was lost. The considerable pace at which the regiment was travelling saw many Dervishes at the lip of the hidden dry stream-bed skewered by lances and thrown back into the crush. The account of 23-year-old Private Wade Rix of A Squadron is dramatic:

As my horse leapt into the deep depression my lance entered the left eye of a white robed figure who had raised his double edged sword to strike. The enormous impact and the weight of the man's body shattered the lance and I cast the broken pieces from me. I quickly drew my sword just in time as another man pointed his flintlock. I struck him down and blood splattered his white robe. Then it was parry and thrust as I spurred my horse on through the melee. Luck was with us, the horse bravely scrambled up the opposite bank of the stream bed and we were through without a scratch. (Quoted in Brighton 1998: 98)

The Pattern 1868 lance had only been issued to the 21st Lancers in 1897 on their conversion from the 21st Hussars, and it may be that the men of the regiment did not feel entirely at ease with the new weapon. Indeed it has been suggested by Terry Brighton in *The Last Charge* that Captain P.A. Kenna carried a trooper's issue lance in the charge in order to instil confidence in his men. Nevertheless, despite the regiment's relative lack of experience with the weapon, no man seems to have divested himself of a serviceable lance in the charge or mêlée – though some asked permission to do so and take up their Pattern 1890 Cavalry swords when a second charge looked likely. The latter weapon had not proved particularly

effective, however. To quote Brighton again: ‘Those who did use the 1887 officer’s and 1890 cavalry swords found them too light for this sort of fighting. Many Dervishes swung heavy doubled edged blades which were virtually medieval broad swords; they cut right through the lancers’ slimmer blades as they parried, and went on to bite deep into man or horse’ (Brighton 1998: 83).

The charge of the 21st Lancers at Omdurman was hailed as a success. Certainly, it was seen as a morale triumph for the lance, even if the shaken enemy were finally dispersed by dismounted carbine fire. Despite some limited use of firearms by both parties, the affair in the stream-bed was the victory of one essentially medieval weapon system (mounted men with lances) over another (dismounted men with sword, shield and spear).

Within two years of Omdurman, the lance was to see its last operational use in Africa in the hands of the five British Lancer regiments (the 5th, 9th, 12th, 16th and 17th) who served in the Second Anglo-Boer War. The 21st Lancers provided drafts of men to reinforce the other regiments. The conflict is often thought of as a traumatic experience for the British cavalry. The true picture, as always, is more complex. In practice, the experience was to prove invaluable in preparing the British cavalry for future conflicts. Opportunities for successful lance action were very few and far between, but the best-known of these, which cannot be ignored, was the charge at Elandslaagte.

On 21 October 1899, the 5th Lancers caught a number of Boers who were attempting to escape from what had been an unusually successful and co-ordinated British assault on Boer prepared positions. ‘The Charge of the two 5ths’, as it was known at the time, saw the use of both lance and sword, the latter by men of the 5th (Prince Charlotte of Wales’s) Dragoon Guards. It was to be the conflict’s only successful *arme blanche* charge at unit level (in this case conducted by both regiments’ C Squadron).

One year after Elandslaagte, in October 1900, lances were officially withdrawn from those British Army units fighting in South Africa. Few opportunities for their use had presented themselves, and it had become

‘A charge of Lancers, from the Boer point of view’, by Frederick Judd Waugh (1861–1940), published in *With the Flag to Pretoria*. A stirring depiction of an all-too-rare event. Waugh’s dynamic piece is notable for its accurate rendering of uniforms and equipment, but the head of the Pattern 1868 lance has been exaggerated into a savage, medieval-looking blade, it obviously being felt that the elegant, fluted triangular head of the actual weapon did not look sufficiently menacing for the artist’s purpose. (Courtesy of Ian Knight)





obvious that cavalry's usage was now no longer – as *Punch* magazine had it in 1892 – ‘to add tone to what would otherwise be a mere vulgar brawl’. Concurrent with the withdrawal of the lance from the front line was the withdrawal of the cavalry's Lee-Enfield carbine. This weapon (effective to 1,200 yards) had found itself dramatically outranged by the enemy's Mauser rifles (sighted to 2,800 yards and extremely effective in the hands of skilled Boer marksmen). The British Army's mounted troops – whether officially titled as Cavalry, Yeomanry, Colonial Corps or Mounted Infantry – were now all to operate primarily in the last category, using their horses as a means of transport before dismounting to use the Long Lee rifle.

Despite opposition from cavalymen of what was literally known as the ‘Old School’, the lance was officially withdrawn from British Army service as a weapon in March 1903, by Army Order 39, being retained only for escort duty, at reviews, and other ceremonial parades. What is more – ‘in issuing these instructions the Commander-in-Chief desires to impress on all ranks that although the Cavalry are armed with the carbine (or rifle) and sword, the carbine (or rifle) will henceforth be considered as the Cavalry soldier's principal weapon’ (quoted in Anglesey 1986: 392).

In the following year, replacement of both the Lee-Enfield carbine and Long Lee rifle with the new SMLE Mk I rifle for both infantry and cavalry would begin. That, one would assume, was the end of the lance's British service. Remarkably, though, within six years Army Order 39 had been overturned and the lance reintroduced ‘during training, at manoeuvres and when so ordered on field service’ (Anglesey 1986: 410). The lance, and shock action, had returned.

‘The Empty Saddle’, by James Prinsep Beadle (1863–1947), perhaps the most evocative – as well as accurate – of contemporary studies of Lancers during the Second Anglo-Boer War. A fallen comrade's mount is brought in by his colleagues. The wounded or dead man's carbine remains in its bucket on the horse's off side, while his Pattern 1868 lance is carried at ‘left arm sling lance’ by the second Lancer (who also carries his own lance at the ‘sling’). (By permission of the trustees of The Royal Lancers Charitable Trust)

WORLD WAR I

Despite rapid changes in weapons technology, the predictions at the start of the 20th century were that the next great European war would be one of movement, in which cavalry would have a crucial part to play. By 1914 most great, and many minor, European powers had lance-armed troops making up a high proportion of their cavalry.

Since 1889 and the introduction of a single type of cavalry, *Einheitskavallerie*, every German cavalry trooper of every regiment was issued with a lance, and counted this as his primary mounted weapon. France once again had lance-armed troops, although none designated as Lancer regiments, as all her Dragoon regiments, almost half the Hussars and one-quarter of Chasseurs à Cheval regiments were equipped with either the Model 1890 or Model 1913 lance.

Likewise, Russia once again counted the lance as an essential weapon for her cavalry in the field. Although the lance was withdrawn from active service for Russia's regular units in 1882, this order was later rescinded. In 1913 a new pattern of service lance was issued to the front rank of all her cavalry regiments, both Cossacks and regular units, making the lance a more common weapon in the Russian cavalry than it had ever been previously.

Britain, despite abolishing the lance from active service in 1903, following the failure of shock action in the Second Anglo-Boer War, brought it back into service in 1909, all six regular Lancer regiments once again being issued with the weapon. This seemingly small number of Lancer regiments, compared to the 25 other regiments of regular cavalry

French Dragoons with lances standing sentry during the Picardy manoeuvres, 1910. (Photo by Branger/Roger Viollet/Getty Images)





and various Yeomanry regiments, was heavily supplemented by the use of the lance in the British Indian Army. There it was carried by a much higher percentage of cavalry, many of whom were regarded as especially skilled in its use.

The Ottoman Empire, her army greatly reformed by German advisors, fielded regiments of regular Lancers armed with a lance of a similar length to the German weapon, in addition to numerous irregular tribal regiments armed with more traditional lances of Arab form. With Italy also fielding several regiments of Lancers, it was only Austria-Hungary of the Great Powers that fielded no lance-armed troops during World War I, her Uhlands having given up their characteristic weapon in the 1880s.

As such, the lance saw use where cavalry were given the – increasingly rare – opportunity to carry out mounted shock action. The opening weeks of World War I saw numerous chances of action for the lance-armed cavalry of all sides. The first Victoria Cross of the war was won by Captain F.O. Grenfell of the 9th Lancers, who led a charge against a large force of German guns at the Action of Elouges on 24 August 1914. Furthermore, Generalleutnant Maximilian von Poseck, in his account of the actions of the German cavalry in France and Belgium in August 1914, describes numerous casualties falling to lances on both sides. This opportunity to use the lance in open warfare was quickly limited in the West, however, as a war of movement was, in a matter of weeks, replaced by siege-like trench warfare, offering little opportunity for lancers.

Lance-armed Indian cavalry of the 20th Deccan Horse of the 2nd Indian Cavalry Division await the order to advance at the Battle of the Somme, 14 July 1916. The regiment undertook the only cavalry charge of the battle: an unsuccessful attack against a battalion of German infantry in High Wood. (Photo by The Print Collector/Print Collector/Getty Images)

The 1912 lance drill

In regular European armies the use of the lance was – as with all weapons – taught to soldiers in a system that meant, amid the terror of the battlefield, it was used in an automatic, unthinking and hopefully effective manner. Drill manuals and long hours of peacetime training, first on foot and then in the saddle, were intended to produce automatic muscle memory of the various thrusts and guards against both mounted and dismounted opponents. This was to remain the basis of British lance drill throughout the Victorian and Edwardian periods. Not just the point, but also the butt, the stave and the pennon of the lance were employed to distract, bludgeon, stab and defend against the rich variety of the Empire's enemies.

The relatively simplified 1912 Lance Drill was that used by the British Army at the beginning of World War I. It consisted of a development of the 'round the clock' system – the rider begins at Carry Lances **(1)**, then comes to the Engage **(2)**. Five points or stabs with the lance are used offensively as follows: first point to the front between the horse's ears **(3)**; second point to the rider's right front **(4)**; third to the right rear **(8)**; fourth to the left rear **(9)**; and fifth to the soldier's left front **(12)**. Each of the five thrusts was preceded by a short jab or feint intended to deceive the opponent. Should the latter not prove successful, then attacks can be seen off with a parrying motion (forcing the enemy's weapon aside with a

horizontal push of the lance) at three of the five point positions – right front **(5)**, right rear **(7)** and left front **(10)**. Should one's enemy penetrate to inside the reach of the point of the lance, then – provided that one has kept one's horse faced towards that opponent – a hefty blow can be administered with the reversed butt of the lance **(6 or 11)**.

Some of these movements are inevitably compromised by the bewildering array of equipment carried on horse and rider. In swinging the lance from the Carry to the Engage, one must be aware of catching the butt of the lance on the projecting SMLE rifle in its bucket – itself festooned with mess tin and canvas water bucket. Such was the perceived difficulty of this movement that Lancer rifle buckets and Pattern 1908 swords could in theory be reversed on different sides of the horse. In practice this seems to have been rarely done, if only because – as can be seen – the sword itself (with feed sack and wooden picketing pin attached) was now scarcely less of a protrusion.

Movement of the lance around the body of the rider was of course also hindered by the substantial number of accoutrements – water-bottle, haversack, bandolier, waist belt with extra ammunition pouches, bayonet and of course gas mask respirator – that can be discerned in this impressive reconstruction. (Images courtesy of Ben Luxmoore)







A German cavalryman armed with a Model 1893 lance, c.1917.
(© IWM Q 56522)

Even in the East, opportunities for large-scale cavalry actions were few and fleeting, with the one traditional cavalry battle of divisional proportions happening at Jaroslavice (21 August 1914). A reconnaissance in force by the Austro-Hungarian 4th Cavalry Division was met by the Russian 10th Cavalry Division in a hard-fought, but indecisive clash, from which neither the sword-armed Austrians nor the lance-armed Russians emerged victorious.

As stalemate ensued, many cavalry units had their horses and lances taken from them, and were set to dismounted duties. Thus it was mainly in small-scale actions, typically towards the war's end when movement had somewhat returned to the battlefield, that lances once again saw some use in a conflict that had been dominated by artillery, machine guns, trenches and barbed wire. Hence the action at El Hinu, during the Affair of Abu Tellul (14 July 1918), seems more typical of the scale of success cavalry could hope to achieve by shock action with the lance. There, the lance-armed Poona Horse and Jodhpore and Mysore Lancers of the Imperial Service Cavalry killed over 90 Ottoman soldiers, took 100 prisoners and four machine guns, including a successful charge against an entrenched position. By the war's end the tank had already surpassed the shock role of the lance-armed horseman in larger actions in major theatres of war.



IMPACT

The critics' verdict

The debate as to the utility of the lance as a weapon of regular cavalry was one that consumed militaries throughout Europe during the 19th and early 20th centuries. Opinions and evidence relating to the lance's effect are almost as numerous and varied as those that proffered them, and this section will attempt to summarize as well as analyse these arguments and other evidence in an attempt to evaluate the weapon's effect – both real and perceived.

WOUNDING EFFECT

'... its thrusts are the most murderous of all *les armes blanches*'. So claimed the French cavalryman Colonel Antoine Fortuné de Brack of the lance in his *Avant-postes de cavalerie légère (Cavalry Outpost Duties)* of 1831, further stating, 'Wounds made in the body by lances kept in good condition are almost always mortal'. De Brack himself then provides evidence to the contrary, however, claiming 'I have seen troopers of our army receive as many as twenty wounds by Cossack lances, without dying of them or even being disabled' (de Brack 2008: 50–53). Nor can this contrary evidence be explained by de Brack's insistence that such wounds were not fatal as the Cossack lance lacked a shoe, and therefore Cossacks thrust their weapons point-first into the ground when they dismounted, thus damaging the blade and making it less deadly. The battle of Waterloo provides numerous examples of British troops surviving over a dozen lance thrusts from French lances – all of which were fitted with a shoe. Furthermore, when assessing the wounded of the battle, Professor John Thomson declared that lance wounds were more likely to heal than those caused by bayonets (quoted in O'Keeffe 2015: 67).

This is not to say that the lance could not be deadly with a single thrust. The very same patterns of lance which caused many non-fatal wounds at Waterloo could, in other circumstance, be extremely lethal. De Brack describes several times seeing these French lances run so far though an enemy with a single thrust, that retrieving the weapon from the body proved extremely difficult. Therefore caution in assessing the lance's wounding capabilities is essential when it had so many different forms and circumstances of use. In addition, the ever constant variables of force applied, and area struck when attempting to assess the wounding effect of any edged weapon must be considered, making general statements as to the lance's general lethality almost impossible. Some blade forms, such as that of the German Model 1893, were of thick, square section which, while strong enough to withstand the shock of impact when couching the weapon in a charge, made it hard to achieve good penetration when thrusting in the *mêlée*, where there was not the speed and weight of a charging horse behind the point. Hence in August 1914 the German 17th and 18th Cavalry divisions both purposely sharpened their lance points, as in skirmishes their patrols 'had made the discovery that the unsharpened points had often been deflected by the clothing of the opponent' (Poseck 2008: 47) when attacking with thrusts. By contrast, Generalleutnant von Poseck reported that when charging with the same lance type at Rocquigny (25 September 1914), personnel of the German Guard Cavalry Division found that they hit the enemy infantry with 'such impact that many of the French were killed outright with the lance' (Poseck 2008: 168).

These examples illustrate how important both the type of lance, and circumstance of its use, were in determining the level of wounding it could cause. The account given by Second Lieutenant J.H. Leche of the British 12th Lancers of his rapid charge against dismounted German cavalry shows how the force of the shock was paramount to the lance being effective: 'Our lances did great work, though they didn't go in as far as one would think – about a foot in most cases. Several men also used the butt with very good effect, and one man got his lance through up to the sling! ... The doctor said the wounds were terrible. Anyhow they squealed enough when they got it' (quoted in Anglesey 1996: 139).

MOUNT QUALITY

The need to have the speed and weight of a charging horse behind a lance for it to be truly effective was acknowledged by all but the most diehard proponents of the weapon. The lancer relied upon his horse to make his weapon deadly and hence most theorists acknowledged that superior mounts and horsemanship were essential to render the lance effective. In some circles this was thought to work in reverse also, with skill at the lance itself promoting good horsemanship. Hence before the lance was adopted, some British cavalry officers in the Napoleonic period had their men train with the weapon, despite never intending to use it in combat. Furthermore, even after the lance had entered British service, regiments that were not equipped with it still practised the sport of tent pegging with

Mounting and dismounting with the lance

Mounting and dismounting with the lance is an art that requires considerable practice. When the lance was first introduced into the British Army in 1816, little thought seems to have been given to the concept of dismounted action by the newly encumbered soldiers – it was enough that the men were able to get on and off their horses safely. Needless to say, the ordinary British cavalryman was not assisted by a groom able to pass up his weapons when he was mounted.

In essence the business of mounting is best managed by holding the lance at its balance point in the left or bridle hand, before preparing to mount. The reins are then taken up in the left hand with a lock of the horse's mane wrapped around the first two fingers to steady matters. The lance is vertical at this point, leaning against the horse's neck and with point safely held upwards. The left foot is placed in the stirrup and from here one climbs smartly up into the saddle, swinging the right leg over and into the right stirrup. For safety's sake the lance must remain vertical lest the potentially lethal point tips over and injures neighbouring riders or horses. It can happen, of course – riders are clumsy and horses unpredictable – but to reduce the chances of an accident further, those mounting are in open order, i.e. there is an interval in the ranks created between each horse.

Once the rider is firmly in his seat, then the lance can be moved into the appropriate military position of 'carry' by bringing it up smartly with the right hand and then lowering the butt down into the small 'lance bucket' strapped to the right stirrup. When riding at ease, the buff leather sling was used to hang the lance from the upper arm, with the butt remaining in the lance bucket. Latterly, there was also another of these buckets strapped to the left stirrup to facilitate a somewhat complicated drill position called 'left arm sling lance'. By 1914, when the British Lancer regiments were expected to be able to dismount *en masse*, to take their place in the firing line with the SMLE rifle, the process was complicated further by the need to transfer the lance securely into the leather rifle bucket on the side of the horse (after having withdrawn the rifle and placed it in the left or bridle hand). Managing these two

hefty weapons as well as the double reins of the Universal Pattern Bridle is quite a process.



This superb study of a British Lancer in full field order repays careful study. Unusually, Private Thomas Byrne VC was photographed in Cairo from both near and off sides. Sadly, photographers did not do the same for his peers in the Crimea and other Victorian campaigns. It has been stated that the Suakin Expedition of 1884–85 was the last time in British service that lance flags were used attached to lances. By this it is presumably meant used unfurled – as can be seen here, the pennons of the 21st Lancers on active service in 1898 were definitely attached, albeit furled and covered in a cover of dark cloth. (Courtesy of the Queen's Royal Lancers Museum)

the weapon. Of course the need – even more so than in other branches of the cavalry – for quality mounts expertly broken and handled was cited by critics of the lance as a reason for its widespread unsuitability compared to the sword. For this was the crux of the debate on the effectiveness of the lance during the 19th and early 20th centuries. It was seldom truly questioned that the role of cavalry on the battlefield, right up until its disappearance from warfare, was to engage in shock tactics against the enemy. But whether this role was best carried out with lance, sword or a combination of the two was perpetually debated.



Sword versus lance – a point for the lance. Competitions were held in various armies between lance- and sword-armed troops and were often won by lancers. Yet only the most skilled would ever represent their regiment in such competitions. As such, some authorities maintained that while the lance was an excellent weapon if used skilfully it was, more so than the sword, ineffective in less expert hands. (© Royal Armouries)

SWORD VERSUS LANCE; THRUST VERSUS CUT

Cavalry swords, like cavalry lances, came in a huge variety of forms over the period in question, but some general observations as to the strengths and weaknesses of each weapon can be – and were – made. As the main battlefield function of cavalry remained the charge in line, it was in terms of the perceived advantages in this action over the sword that lance advocates argued for the weapon's use.

Widely but not necessarily accurately, the thrust was believed to be generally more deadly than the cut with an edged weapon, and especially useful in the first contact of the charge; and the lance, being exclusively designed for point attacks, was the thrusting weapon *par excellence*. During contact, the combined force of the weight and speed of a charging horse and rider was transmitted to the target on the point of the lance. Even the most thrust-centrally designed sword of the period usually had to have some cutting capability, which by necessity made the sword less than perfectly suited to thrusting. Furthermore, the vast majority of cavalry swords were not designed primarily for thrusting, but were either compromise cut-and-thrust weapons or cut-centric designs.

THE ADVANTAGE OF REACH

The advantage most often cited of the lance over the sword, however, was the lance's increased reach. Even the shortest of lances, balanced only halfway down the shaft, would provide a reach in front of the cavalryman's hand of at least 50in; many longer, tapered and counterweighted lances gave considerably more. By contrast, even the very longest swords could

provide a reach of only 38in. Thereby, it was reasoned, a lancer could engage and kill his target before he himself could be struck. This was of benefit not only against another mounted opponent, enabling the lancer to strike first if the two forces met head-to-head, but was particularly useful against infantry. The lance's enhanced effect against infantry was especially true during the period of muzzle-loading firearms, when after a single shot at relatively close range, an infantryman would have to begin the slow reloading process or rely on his bayonet for defence against cavalry. Yet in hand-to-hand combat, sword-armed cavalry often had less reach than an infantryman with bayonet fixed to a musket. Hence when drawn up in square, infantry were doubly impenetrable to sword-armed cavalry. Even if the attacking cavalry withstood the square's musketry, a steady square presenting a close hedge of bayonets could keep sword-armed cavalry at bay – but not the lancer with his extended reach. When wet weather rendered flintlock firearms less effective, French Lancers at Dresden and Katzbach (26–27 August 1813) were able to outreach and break Prussian infantry units in square formation. Even without the assistance of the weather, lancers could still cause damage to even steady infantry squares. Sergeant David Robertson of the British 92nd Foot described at Waterloo how, after braving musketry from his square, the French Lancers 'did us considerable damage by throwing their lances into our columns, which being much longer than the firelock and bayonet, gave them a greater reach over us' (quoted in Low & MacBride 1911: 162).

This extra reach the lance provided meant it was also uniquely suited to attacking prone troops, whether they be infantry that had thrown themselves down when overrun, those who had gone prone as a deliberate tactic, unhorsed cavalymen or artillerymen taking refuge under their guns. The ability to prevent an enemy rising up and firing at the cavalry, who if armed only with a sword would have often passed over harmlessly out of reach, could be of considerable benefit in completing the success of a charge. Furthermore, in the pursuit against mounted troops, where there could be both the space and speed necessary to wield a lance effectively, the lance's reach could be particularly deadly. A lancer, if he were a skilled horseman, could pick off sword-armed cavalry in a disordered pursuit, using his longer weapon while keeping out of range of the enemy's swords. Lancers were particularly effective in causing casualties in this manner against sword-armed cavalry on tired horses, as French Lancers proved against the British heavy cavalry at Waterloo.



A trooper of the Ottoman Empire's 2nd Lancers, 1897. Although robust and providing an increased reach, the long metal lances used by many countries' forces at the beginning of the 20th century could be especially unwieldy at close quarters. (© Royal Armouries)

Tent pegging

The arts of fencing with the sword and tent pegging with a lance are both modern sporting manifestations of training with the *arme blanche*. Tent pegging as a sport has truly ancient origins that appear to be genuinely lost in time. It seems to have originated in the Indian subcontinent, however, possibly as early as the 4th century BC. It was certainly in India that the British Army picked up the sport and popularized it throughout the Empire and later Western Europe. The aim of the sport is to pick up a small wooden target, the 'Tent Peg', with the point of the lance at the gallop.

A popular story explaining the origin of the sport relates that mounted cavalymen would gallop into an enemy camp and neatly extract the pegs from the tents. The unfortunate occupants would then be stabbed by a second wave of cavalymen as they writhed around helplessly. There are, alas, no verified accounts of this bold military manoeuvre actually occurring.

It seems much more likely that wooden tent pegs simply provided a convenient source of targets for lance practice. From a military point of view, the real value of the exercise lay in the stark need to manage the weapon in a careful and systematic fashion at the gallop – a logical development from the static training of lance drills. In both exercises it is essential to know where the sharp point and the metal butt of the lance are at any one point. It behoves the competitor not to stick the point into the ground when first thrusting for the target. This can be bad for the rider, especially if he has attached himself in any way to the weapon via its sling strap. It can be worse still for the horse, if in attempting to strike the peg the tent pegger leans around the front of the horse at the gallop. The consequences for the horse of running chest-first onto a snapped-off wooden lance shaft can be envisaged. In the experience of one of the authors, these potentially fatal consequences certainly add a sense of immediacy to the undertaking.



One of the authors tent pegging, as recreated by The Troop. Note the speed of the horse; it is important that the mount be galloping in order to give as low a profile as possible, thereby lessening the distance to the target. (Photograph courtesy of Phil Holmes)



Indian cavalry tent pegging in sections, by John Charlton (1849–1917). A print from *The Graphic*, 30 August 1890. (Photo by The Print Collector/Print Collector/Getty Images)

Traditional Asian tent pegging involves the use of a relatively light short lance or spear no more than 6ft in length. Furnished with a counterweight at the butt, it is employed in a simple forward-swinging arc to catch the target off the ground. The spear – and hopefully the target now on the spearpoint – can then be neatly displayed with the flick of the wrist.

The British Army chose to conduct tent pegging with the much longer regulation 9ft military lance, however. The extra length and weight mean that after the lance was thrust forward at the target, be it wooden peg or human body, the point had to be swung up and behind the body in a smooth action – rotating the heavy metal butt across the shoulders and behind the rider's head, in order to avoid knocking oneself out.

If troops were to be allowed to spend time participating in this potentially dangerous sport (which was also hard on horses' legs, given the short bursts of galloping involved on often very hard ground), then there must have been military as opposed to purely recreational value. The military value of tent pegging lay in the mastery of the lance at speed and an acquired muscle memory

facilitating both an accurate thrust into the target and an efficient follow-through. One need only consider this eyewitness description by Trooper Mossop of British Lancers at Ulundi, to see how grimly efficient the result could be:

As the big horses bounded forward and thundered into them, each lance point pierced the Zulu in front of it, the man fell, and as the horse passed on beyond him the lance was withdrawn, lifted and thrust forward into another Zulu in front.

The movement of withdrawing the lance and getting it into position was very rapid: I could not quite understand how it was done ... It was a grand sight to see them at work, but they did not appear to be humans and horses – just a huge machine. A handle was turned – and it shot forward; a button was pressed – up went the spears, and it reformed into line; another button was pressed – down went those awful spears, and it again shot forward. (Quoted in Anglesey 1982: 201)

LANCES IN THE MÊLÉE

The reach of the lance could also be a hindrance, however. While in theory the object of the cavalry charge was to break the enemy immediately, leading to the pursuit of the broken foe or enabling the victors to re-form and charge again, in practice a mêlée often ensued. Although in the first shock of the charge the reach of the lance and the power of movement could be translated into the lance's point to strike first and with huge force, this could not happen so effectively when momentum was lost and formations disrupted. Deprived of the speed of his horse to add power to his weapon, and potentially unable to bring the point to bear in a close-fought mêlée, the lancer could be at a disadvantage. As Captain Louis Edward Nolan wrote in 1853, while 'at speed you can drive a lance through anything, not so at a slower pace; and at a walk, and a stand you become helpless, and the thrust can be put aside easily or the pole seized with the hand' (Nolan 1853: 131). So happened at Aliwal (28 January 1846) where after penetrating a Sikh infantry square with a successful charge the British 16th Lancers, robbed of momentum and room to use their lances effectively, suffered at the hands of Sikh swordsmen in the ensuing mêlée. In theory, more than the point of the lance could be used offensively, with some manuals prescribing strikes with the weighted shoe, sweeping motions with the haft, or even such elaborate movements as the 'St George' or the 'round-wave' advocated by Lieutenant-General Sir Henry Wilkinson. Although potentially useful in more static combats, due to the lance's length such motions still required space to be effective – space that could be denied the lancer in a mêlée.

Lack of motion and space to make best use of the lance could be equally problematic when lancers engaged sword-armed cavalry. Baron de Marbot describes how in 1812, in the initial impact of the charge, the lance-armed Russian Guard Cossacks had the advantage against his sword-armed 23rd Chasseurs à Cheval, of whom 'some were killed and many wounded', but the tide turned as the charge turned into a mêlée: 'once my gallant troopers had broken through this line bristling with steel, they had the advantage, for the long lances are ineffective against cavalry when those carrying them are disorganised and closely engaged by adversaries who are armed with sabres which they can use with ease, while the lancers have great difficulty in presenting the point of their weapons' (de Marbot 2000: 208).

Occasionally, attempts were made to use the reach of the lance advantageously when static, although only with mixed success. At Genappe (17 June 1815) French lancers, closely packed in a narrow street, presented a hedge of lance points to British sword-armed cavalry. Despite successive spirited attempts by the British 7th Hussars to dislodge the lancers they could not, and took many casualties, with Colonel Sir William Verner remarking they 'might have well charged a house, as the front of the enemy's lances presenting a Chevaux de Frise of lances' (quoted in Linney 1990: 94). (A *cheval de frise* is a portable anti-cavalry defence of several spikes or stakes.) The lancers were only defeated when, flushed with success, they quit their narrow defensive position and pursued, only to be set upon by fresh heavy cavalry of the British 1st Life Guards. This tactic was not always successful, however, as the Lancers of Berg (Germans in French service) found at Espeja (26 September 1811). Receiving the charge of two squadrons



of the British 14th Light Dragoons at the stand with lances lowered, the German horsemen failed to repulse the swordsmen who penetrated their formation with ease, causing more than 60 casualties and routing the Lancers.

But the lance, like cavalry itself, was a weapon of offensive, not defensive purpose. Few armies ever condoned their cavalry receiving a charge defensively at the stand when mounted, whether with lance, sword or firearms. Hence the mixed success the lance had in such defensive engagements cannot be said to have made it an inferior weapon to the sword. Where the lance was truly suspect in defensive qualities was not its use in formation, so much as in the difficulty users had in defending themselves individually with the weapon. Not only could a lance be hard to bring to bear or generate power with in a *mêlée*, but parrying with the lance was much harder than with the sword. Despite manuals of use invariably outlining various modes

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Two illustrations from a Bavarian source, showing infantrymen in combat with Lancers. These striking prints emphasize the fact that an infantryman need not be overwhelmed by a mounted Lancer. As was noted by more than one contemporary writer, a Lancer could find himself severely compromised when he had lost momentum, consequently providing a large and vulnerable target for a bayonet-armed infantryman possessed of determination and agility. Here, the foot-soldier has first pushed aside the shaft of his opponent's lance, getting under the mounted man's guard and enabling a bayonet thrust to the latter's bridle hand or torso. (Anne S.K. Brown Collection, Brown University Library)



Using the lance

It has been the privilege of one of the authors (albeit on occasion a slightly fraught privilege) to interpret and demonstrate the use of a variety of weapons on horseback. This has encompassed everything from bows and swords to pistols of all sorts and the lance in its various forms (including medieval lances and the two-handed Greek *kontos*). It is fair to say that of these, the use of the British cavalry lance has proved to be one of the most challenging; simply because of the number of things that can go wrong. One has seen a rider catapulted from the saddle when the point of a tent-pegging lance was inadvertently stuck in the ground at the gallop, as well as a re-enactment lancer poked in the eye by his neighbour during lance drill. Even the ostensibly simple business of transporting the British Pattern 1868 lance on the side of a horse during dismounted carbine work can end in disaster for the horse if the weapon comes loose and the errant point threatens the unfortunate animal. In short, proficiency with the lance is only achieved by 'training and more training', and by paying close attention to the appropriate drill manuals – these are, after all, the distillation of many years of trial, error and hard-won experience.

Today in military service the lance is carried mounted in a purely ceremonial role, handed up from the ground to its user and held only at the 'carry'. With the exception of some limited ceremonial dismounted usage, the teaching of the Lance Drill manuals of yore is now a lost art. Consequently, for historical reconstruction purposes, it has often been a challenging task to learn these from scratch on horseback. 'Thrusts', 'parries', 'guards' and the 'waves' of pennons and lances, accompanied by shouted orders, have proved challenging for both riders and horses. The latter have on occasion, and not unreasonably, objected and shied as the pennoned weapon is waved around their heads. As was originally the case, the majority of horses do become accustomed to this intrusion. Part of the point of the exercise was, of course, to frighten enemy horses with a figure-of-eight wave with one's pennon, thereby unsettling or even unseating a mounted opponent. How successful this tactic proved in practice is debatable. In any case the pennon was in later years either furled – wrapped around the staff – as at Omdurman (2 September 1898), or dispensed with completely from the time of the Second Anglo-Boer War. How the pennon was affixed was by then seemingly somewhat academic, as the lance itself was withdrawn from service in the field from 1900, the Boers having generally shown a lamentable unwillingness to offer themselves up to British Lancers.

One of the authors is lucky enough to possess an original French Model 1812 as well as British Pattern 1846 and Pattern 1868 variations. The physical differences in terms of weight and balance are of course significant in how the weapons handle, and show a gratifying sequential improvement.

The French Model 1812 lance is the heaviest and is the most challenging to use as a consequence. This challenge is of course relative, as would have been testified to by survivors of Wellington's heavy cavalry at Waterloo. This lance was used by General Charles Claude Jacquinet's 3th and 4th regiments of Line Lancers against the British cavalrymen (in many cases already wounded and helpless upon the ground) and retreating, exhausted horses. In these often one-sided contests, the weight of the Model 1812 lance deployed at speed was used to dreadful effect.

In a hand-to-hand contest with an experienced swordsman on a fresh horse, the outcome could be very different, however. In the words of Sergeant Charles Ewart of the 2nd (Royal North British) Dragoons: 'a Lancer came at me; I threw the lance off by my right side, and cut him through the chin upwards through the teeth ...' (quoted in Fletcher 1999: 247). The weapon used by Ewart was the notoriously clumsy British Pattern 1796 Heavy Cavalry sword, but in the hands of a powerful 6ft 4in man such as Ewart (who also happened to be his regiment's master-at-arms) it was clearly more than a match for the lance of the unfortunate Frenchman. The



A trooper of the 6th Dragoon Guards (Carabiniers) in review order, 1899, by F. O'Beirne. Note the Pattern 1868 lance, marking the subject as a front ranker. Between 1892 and 1903 Britain issued lances to the front-rank personnel of even her 'heavy' regiments, such as Dragoons and Dragoon Guards. (Anne S.K. Brown Collection, Brown University Library)



Perhaps the most dashing and elegant of Victorian Lancer regiments, the 17th Lancers c.1895, recreated by The Troop at Kirby Hall for English Heritage. The Pattern 1868 lance with pennon is carried at the Engage, while horsehair plumes dance above the distinctive white-topped lance caps. The effort required for the full-dress turnout of 'Bingham's Dandies' or 'The Pipeclay Boys' can be appreciated in the crisp elegance of blancoed facings, brassoed buttons, polished boots and saddlery and highly groomed horses. In the centre of the line a sergeant is about to make life interesting for his comrades by discharging his issue .455 revolver. (Alan Larsen Collection)

essence of this much-quoted encounter is that once Ewart was inside the reach of his opponent, the latter was helpless. Having wasted the initial advantage of superior reach, only a lancer who was as equally strong and dexterous as Ewart would have had the ability to spin the heavy lance sufficiently quickly to block the incoming sword blade.

The author's British Pattern 1846 lance is, from a handling point of view, a slight improvement on the French Model 1812, in that the weight is reduced as a consequence of its slimmer profile. The balance point – which varies slightly in each example – remains at approximately halfway down the lance. Finally, and perhaps not surprisingly, the British Pattern 1868 bamboo lance is the handiest of the original lances tested on horseback. Its strength and flexibility make it ideal for the still-popular sport of tent pegging.

With respect to the balance of a lance, it is important to remember that the leather sling is affixed to the lance in a position that facilitates the slinging of the weapon on the upper arm. The leather sling is not, as is sometimes assumed, primarily to designate the balance point of the staff, or to prevent the lance from becoming lost in action. Indeed, one would very much not

wish to remain attached to a lance that one had failed to extricate from an opponent!

An ongoing consideration in lance design was the robustness or otherwise of the weapon. In action the weight and length of the lance was balanced against its inherent strength on impact. In the British service there are accounts of lances being driven right through an opponent, or through two mounted men attempting to escape on one horse (as at Elandslaagte on 21 October 1899). The transition from ash to bamboo was a gradual process as experiments were conducted with the latter. There is no doubt that bamboo, while more flexible, could also be more fragile.

Considerations of aesthetics – justifiable or otherwise – also played a part. It is recorded that when the bamboo lance was first issued to the 16th Lancers, its 'unmilitary' appearance was disapproved of by their commanding officer, Colonel W.T. Dickson. He ordered the regimental carpenter to spokeshave down the rings of the joints of the staves to give a more conventional appearance. As a consequence, the lances fell apart *en masse* at the trot – and the good colonel then complained about their fragility!

The 5th Lancers on exercise, 1910. A very fine depiction indeed of the sheer momentum and *élan* of a charging Lancer regiment—shortly before their demise as a force on the battlefield. Correct in every detail, this painting by an unknown artist gives a viewpoint normally only accessible to a mounted Lancer officer turning in the saddle at the gallop. As one would expect, Pattern 1868 lances with pennons are held vertically at the Carry by the rear rank and horizontally at the Engage by the front. The latter line of sharp points immediately behind them would of course encourage the officers and trumpeters riding in front, to keep at least the regulation distance ahead of their comrades. (Anne S.K. Brown Collection, Brown University Library)

of defence, in practice these would have been far from simple. Unlike the swordsman's hand, the lancer's was unprotected by a hilt, and the greater length and weight of the lance meant parries were slower to execute than with the sword and could not be managed easily in close formation. This would have been slightly easier with shorter, lighter lances, but these were still not as easy to parry with as a sword, and could be more vulnerable to breakage if struck with a blade. The metal lances of the late 19th and early 20th centuries were certainly robust, but as they were usually heavier and longer than their predecessors they were even less 'handy'. As Trooper Ted Worrell of the British 4th Dragoon Guards remarked after engaging the lance-armed Germans of the 4th Cuirassiers at Casteau (22 August 1914): 'The Jerries couldn't manage their long lances at close quarters and several of them threw them away and tried to surrender but we weren't in no mood to take prisoners and we downed a lot of them before they managed to break it off and gallop away' (quoted in Anglesey 1996: 113).

LANCE AND SWORD COMBINED

The various, and much debated, pros and cons of the lance compared to the sword must be considered alongside the fact that most militaries expected these weapons not only to compete against, but also to complement, each other. From the lance's reintroduction to modern warfare onwards, mixed units of lance- and sword-armed cavalrymen were used together. As early as 1741 Saxon lancers were supported by sword- and carbine-armed cavalry, and during the Napoleonic age only the front rank of French Lancer units carried the lance, the second rank

following with the sword and carrying a carbine. This system of mixed armament was used throughout the period by numerous militaries. In 1892 even Britain, the one country that had hitherto resisted the arguments for mixed armaments in the same regiment, equipped the front rank of all her cavalry regiments, apart from the Hussars, with the lance, thereby adopting a system that had been used at various times by France, Russia, Italy, Prussia, Austria, and in India. This combination was



reasoned to make best use of each weapon's respective strengths: the lance for shock impact, and the sword in the *mêlée*, with the swordsmen performing the majority of scouting or dismounted tasks. As Lieutenant G.H. Elliot of the 3rd Bengal Cavalry stated in 1875, 'by combining these weapons in support of each other, every possible contingency of war is provided for as far as the use of edged and pointed weapons is concerned' (Elliot 2008: 18). When combined, lance- and sword-armed troops could provide the complete cavalry force, just as the combined-arms tactics practised by infantry, cavalry and artillery had to work in unison to be truly effective.

SHOCK AND AWE

An area in which the lance could be said to hold dominance over the sword was of the utmost import to cavalry: its perceived morale effect. Cavalry was the arm whose purpose, through the charge, was not so much to kill, as to produce a decisive morale effect on the enemy; and in this regard even critics of the lance spoke of the weapon's potential of having a greater effect on morale than the sword. As Lieutenant R. Elias argued in his lecture 'Lancers and Lances' in 1889, 'The power of a weapon as a tactical instrument is not to be gauged only by its material properties; its power increases with the confidence it inspires in him who uses it and the terror it strikes into those threatened by it' (Elias 1889: 752).

Whether the additional morale effect of the lance was borne out in practice is harder to quantify. Numerous factors exerted an effect on morale in combat, and as various examples exist of shock successes and failures of both sword- and lance-armed cavalry, it is almost impossible to attribute a proven superiority in psychological effect to one weapon over the other. Yet crucially, the perceived psychological benefit the lance was thought to

Nolan's verdict

It was that controversial, self-proclaimed cavalry expert Captain Louis Edward Nolan who stated that the cavalry lance was a useless weapon in the hands of anything other than a highly trained horse soldier. As with so many of Nolan's forthright opinions, there is some justification to this claim. The time taken to transform the raw recruit into an effective rider varied from army to army, but could generally be managed for all but the clumsiest in a matter of two to three months. Nolan, needless to say, had views on this also, as outlined in the first of his two published books. The use of cavalry weapons in an effective manner (i.e. in a manner dangerous to one's opponents but less so to one's colleagues) is a different matter altogether, however, requiring training and constant practice for both rider and horse.

Nolan's writings on the use of the lance betray, one suspects, his lack of actual battlefield experience with the weapon itself, at the time of publication of *Cavalry: Its History and Tactics* in 1853. He also perhaps fails to appreciate fully that the primary impact of the lance was not so much physical as psychological; and the considerable effect on morale that a mass of lance points, accentuated by pennons, lowered as one, could have on an enemy.

provide was enough to ensure its continued use. As long as cavalry had a place on the battlefield, the morale shock of the charge remained the justification for their existence, and in spite of all changing conditions of warfare, cavalry of all countries held fast to this belief. For the cavalry to lose the charge was to lose their purpose, and the singular benefits and failings of the lance wed them to this purpose. The lance was the manifestation of the 'cavalry spirit', a weapon of truly offensive action, and hence was clung to for as long as cavalry were thought to have a place in war.

RECONNAISSANCE AND DISMOUNTED DUTIES

The main purpose of cavalry throughout the period was maintained to be the charge in line. As occasions for its effective deployment became increasingly rare from the late 19th century, however, armies gave the other duties of cavalry slightly more consideration than they had hitherto. In the tasks of skirmishing, reconnaissance and dismounted duties with the firearm, the lance was seen as an encumbrance. Its detractors criticized its potential for becoming entangled in close country, pennons giving away a scout's position, and the problems of how to manage the weapon effectively when dismounted, citing these as evidence of the weapon's unsuitability. As with so many of the theories and evidence on the lance there were counter-arguments, however. The ability of the lancer to scout and raid effectively was proven in the Franco-Prussian War, where many more reports mentioned the Prussian Uhlans' success in these non-battlefield duties than that of their sword-armed counterparts in the Hussars and Dragoons. Pennons that could perhaps draw the attention of the enemy when scouting could equally distract an opponent's horse in combat, sometimes enabling a lancer to spear the rider 'through the body in the "twinkling of an eye"' (quoted in Muir 1998: 111). Furthermore, once carbines were widely carried in saddle buckets, lancers could, like their sword-armed counterparts, be equipped with a firearm effective for dismounted duties, rather than just the pistols with which they were often previously furnished.

When the first British Lancer regiments were formed immediately after the Napoleonic Wars, the cavalry carbine (a shortened musket or rifle) was not initially a part of their armoury, it being thought that the soldier already had his hands full, quite literally, with reins and lance without attempting to carry – or load – another unwieldy weapon. The carbine, it was correctly believed, would interfere with the use of the lance. In this the newly formed British regiments were following the example of Napoleon's Lancers. The hard-won experience of the French (both in scouting duties and in combat on many European battlefields) had culminated in a system whereby the men of the rear rank, of a two-rank formation, were armed with carbines instead of lances, it being felt that otherwise there was considerable potential danger to the front rank. The front-rank men, for their part, were armed with lances but no carbines. It should be noted, however, that this entirely sensible practice had only been put in place in Napoleon's cavalry after some years of trial and error.

There were also good horse-management issues in support of reducing the weaponry carried. The combined weight of lance, carbine, pistols and sword was considerable. Added to the weight of the rider, his uniform and saddlery, it often proved too much for an often overworked and underfed mount. Throughout the period under consideration this led to a terrible wastage of horseflesh, with many more overburdened horses dying on campaign from overwork and shortage of feed, than were ever killed on the battlefield. Not only was the actual combined weight a problem – how it was distributed on the animal's back was crucial. Uneven pressure on the load-bearing part of a horse's back can rapidly lead to sores which in turn can mean it cannot be ridden. Cavalrymen at war were not noted for their sentimentality, but military common sense (and the cost and difficulty of procuring remounts) dictated that care was taken to spread the weight of their impedimenta evenly.

For the lancer this was particularly problematic. Whether carried upright at the 'carry' or slung 'at ease' on the arm, the weight of the lance was a constant drag on the right side of the horse. As noted above, the carbine accentuated this problem. Depending on the period in question, the method of its carriage varied. When issued to Napoleonic Lancers, the flintlock version was carried on the man, hanging on a carbine sling-swivel, or, if not required for immediate use, strapped muzzle-down to the front of the saddle. In the latter case a specific and unwelcome weight was transferred to the delicate withers of the horse – an area covered only by a thin layer of skin and flesh and particularly vulnerable to damage.

Matters improved only marginally for the carbine- and lance-carrying cavalryman and his mount with the introduction of breech-loading weapons. Campaign experience had shown that some form of long-range firearm was needed if the lancer was to function effectively in a scouting or dismounted role. From the 1860s onwards – though later in some armies – the carbine was carried barrel-down in a stiff leather bucket attached to the rear of the saddle, behind the rider's right leg. Though more comfortable for the cavalryman, this system still put undue pressure on one side of the horse's back – a situation not entirely balanced by the weight of the sword in its metal scabbard attached to the other side of the horse. The final years of mounted warfare saw the field equipment of cavalry on campaign (picket posts and ropes, mess tins, water buckets and feed sacks) strapped to sword and rifle buckets in various combinations, intended to balance the weight better on the back of the long-suffering troop horse.



Original watercolour after Richard Caton Woodville (1856–1927), reproduced in *The Illustrated London News*, 3 September 1898, showing a mounted trooper of the 21st Lancers in campaign dress. Note the considerable load carried on the mount and the variety of weapons a lancer had to manage. (Anne S.K. Brown Collection, Brown University Library)



CONCLUSION

The debate as to whether or not the lance was the best, or indeed a suitable, weapon for regular cavalry was never resolved. Rapid changes in weapons technology rendered that debate irrelevant. By the end of World War I the functions of cavalry had been surpassed in almost every aspect by new arms. Reconnaissance and raids could be more effectively carried out from the air than from horseback, and armoured tanks could provide the battlefield function of the charge, over trenches and through the barbed wire that had proved impassable to horsemen. As aircraft and armoured vehicles rapidly improved in performance, the gulf in effectiveness between these new arms and the cavalry they were replacing only increased. The horse soldier lingered on in many armies in the interwar years, but his place in war, where he had one at all, was now as a mounted infantryman. It is perhaps fitting that one of the last countries to abandon the lance was the nation that had done so much to bring the weapon back into widespread use almost two centuries before; but in 1937, even the Polish Army withdrew their national weapon as a standard arm for their cavalry.

A short work such as this cannot hope to fully cover the century-spanning, worldwide story of this, the most defining and divisive of cavalry weapons. The lance came in a huge variety of forms and had many different methods of use by various nations at various times. It was used in actions great and small all over the world and, perhaps most intriguingly, was the cause of so much debate and ever-changing military policy on the lance's place in war. As such this work cannot claim to have covered any of these areas exhaustively. Instead the authors hope to have provided an overview of the weapon and how, when and why it was used, to encourage further study of the lance's fascinating place in the history of modern warfare.

GLOSSARY

BLADE CROSS-SECTION	The shape of a blade if cut in two at its thickest point.
HAFT	The pole of the lance, which has the HEAD at the top and SHOE at the bottom. Aka STAFF and STAVE.
HEAD	The metal top of the lance. From the top down it contains the blade, the neck, then the socket or TANG.
LANGET	A strip of metal extending from the HEAD of the lance to secure the HEAD further and to protect the upper part of the HAFT. Langets can be separate or integral to the HEAD. The SHOE can also be attached by short langets.
PENNON	The flag on a lance, aka pennant.
POINT OF BALANCE	The point along the HAFT where a lance naturally balances, making it the most comfortable place for the hand to grip.
SHOE	The metal covering at the butt end of the lance. This protects the bottom of the HAFT and enabled the lance to be stuck, shoe first, into the ground when the lancer dismounted. The shoe could also act as a counterweight to the HEAD, and be used to make strikes with when the weapon was reversed.
SLING	Usually leather and generally attached at the POINT OF BALANCE of the lance. Used to sling the lance on the shoulder or arm to free the rider's hands. It could also act as a grip.
STAFF	See HAFT.
STAVE	See HAFT.
TANG	The back portion of the blade that extends through the HAFT or grip of an edged weapon to join them together. Most lances used sockets rather than tangs as the means for attaching the HEAD to the HAFT. Aka shank.
UHLAN	Term used instead of lancer in German, Austrian and Russian armies.



Governor's Bodyguard, Bombay, c.1927, by Major-General C.I. Fry. Formed in 1863, this unit wore a striking scarlet uniform similar to those worn by the Governor General's Bodyguard and which can be seen to this day worn by India's Presidential Bodyguard. (Anne S.K. Brown Collection, Brown University Library)

BIBLIOGRAPHY

- Anglesey, Marquess of (1973–97). *A History of the British Cavalry: 1816–1919*. 8 vols. London: Leo Cooper.
- Ariès, Christian (1968). *Armes Blanches Militaires Français*, vol. VIII. Nantes: publisher not known.
- Barthorp, Michael (1984). *British Cavalry Uniforms since 1660*. Poole: Blandford.
- Bartocci, Alfredo & Salvatici, Luciano (1978). *Armamento Individuale dell'Esercito Piemontese e Italiano: Cavalleria, Artiglieria a cavallo, Treno di provianda*. Florence: Edibase.
- Blaschek, Joseph (1897). 'The story of Rushes Lancers', in *The National Tribune*, 24 June 1897.
- Brack, Antoine Fortuné de (2008). *Cavalry Outpost Duties*. Auzielle: LRT Editions. Originally published in French in 1831.
- Brighton, Terry (1998). *The Last Charge: The 21st Lancers and the Battle of Omdurman*. Marlborough: Crowood.
- Brighton, Terry (2004). *Hell Riders: The Truth about the Charge of the Light Brigade*. London: Viking.
- Brown, Rodney Hilton (1967). *American Polearms 1526–1865: The Lance, Halberd, Spontoen, Pike and Naval Boarding Weapons*. New Milford, CT: N. Flayderman.
- Buchholz, Frank, Robinson, Janet & Robinson, Joe (2013). *The Great War Dawning: Germany and its Army at the Start of World War I*. Vienna: Verlag Militaria.
- Chappell, Mike (1983). *British Cavalry Equipments 1800–1941*. Men-at-Arms 138. London: Osprey.
- Chlapowski, Dezydery, trans. Tim Simmons (1992). *Memoirs of a Polish Lancer*. Chicago, IL: The Emperor's Press.
- Chown, John (1969). 'The British Lance', in *Canadian Journal of Arms Collecting*, vol. 7, no. 3: 97–102.
- Clammer, D, ed. (1980). 'The Recollections of Miles Gissop: With the 17th Lancers in Zululand', in *Journal of the Society for Army Historical Research*, Vol. LVIII: 78–92.
- Dalton, Charles (1904). *The Waterloo Roll Call with biographical notes and anecdotes*. 2nd edition. London: Eyre & Spottiswoode.
- De Montmorency, Lieutenant-Colonel R.H. (1820). *Proposed Rules and Regulations for the Exercise and Manoeuvres of the Lance, compiled entirely from the Polish System, adapted to the Formations, Movements and Exercise of the British Cavalry*. London: Longman, Hurst, Rees, Orme & Brown.
- Elias, R. (1889). 'Lancers and Lances', in *Journal of the Royal United Service Institution Journal*, Vol. 33: 751–67.
- Elliot, G.H. (2008). *The Armament of Cavalry*. Uckfield: Naval & Military Press. Originally published in 1875.
- Fernand, Nicolas (1996). *Evolution des Tenues Militaires Belges 1863–1915: Cavalerie*. Brussels: Nicolas Fernand.
- ffoulkes, Charles & Hopkinson, E.C. (1967). *Sword, Lance & Bayonet: A Record of Arms of the British Army & Navy*, 2nd edition. New York, NY: Arco Publishing.
- Fletcher, Ian (1999). *Galloping at Everything: The British Cavalry in the Peninsular War and at Waterloo, 1800–15*. Staplehurst: Spellmount.
- Fortescue, J.W. (1895). *History of the 17th Lancers*. London: Macmillan.
- Gracey, Reverend S.L. (1868). *Annals of the 6th Pennsylvania Cavalry*. Philadelphia, PA: Butler & Co.

- Graham, Henry (1912). *History of the 16th, The Queen's, Light Dragoons (Lancers), 1759 to 1912*. Devizes: privately printed.
- Herr, Ulrich & Nguyen, Jens (2006). *The German Cavalry from 1871 to 1914: Uniforms and Equipment*. Vienna: Verlag Militaria.
- Knight, Ian (1988). '17th Lancers, Zululand, 1879', in *Military Illustrated* 10: 11–17.
- Kraus, Jürgen (2004). *The German Army in the First World War: Uniforms and Equipment, 1914–1918*. Vienna: Verlag Militaria.
- Kulinsky, Alexander (2001). *Russian Edged Weapons, Polearms & Bayonets, 18th–20th Centuries*, Vol. I. St Petersburg: Atlant.
- Kulinsky, Alexander (2003). *European Edged Weapons*. St Petersburg: Atlant.
- Lehautcourt, P, trans. E. Makins (1908). 'Studies in Applied Tactics: Cavalry in Battle 15th and 16th August 1870', in *Royal United Service Institution Journal*, Vol. 52: 236–46, 345–54, 532–38, 680–89, 828–35, 948–56, 1081–92, 1248–59, 1354–59.
- Linney, C.A. (1990). 'The Origins and Formation of the First British Lancer Regiments 1793–1823', in *Journal of the Society for Army Historical Research*, Vol. LXVIII: 83–102.
- Low, Edward & MacBride, Mackenzie (1911). *With Napoleon at Waterloo: and other unpublished documents of the Waterloo and Peninsular campaigns: also papers on Waterloo*. London: Francis Griffiths.
- Løvschall, Frans (1998). *The New Moeller: Old Danish Military Weapons*. Næstved: Devantier.
- Marbot, Baron de, ed. Christopher Summerville (2000). *The Exploits of Baron de Marbot*. London: Constable. Originally published in French in 1891.
- Mayne, C.B. (1905). 'The Lance as a Cavalry Weapon', in *Journal of the Royal United Service Institution*, Vol. 49: 119–40.
- Mirouze, Laurent & Dekerle, Stéphane (2007). *The French Army in the First World War – To Battle 1914: Uniforms, Equipment, Armament*, Vol. 1. Vienna: Verlag Militaria.
- Muir, Rory (1998). *Tactics and the Experience of Battle in the Age of Napoleon*. London: Yale University Press.
- Nolan, Louis Edward (1852). *The Training of Cavalry Remount Horses: A New System*. London: Parker, Furnival & Parker.
- Nolan, Louis Edward (1853). *Cavalry: Its History and Tactics*. London: Thomas Bosworth.
- O'Keeffe, Paul (2015). *Waterloo: The Aftermath*. London: Vintage.
- Osten, von Anton Prokesch (1824). *Ueber den Kosaken, und dessen Brauchbarkeit im Felde*. Vienna: Anton Strauß.
- Poseck, Maximilian von (2008). *The German Cavalry in Belgium and France – 1914*. Leigh-on-Sea: Partizan Press. Originally published in German in 1923.
- Rubí, B. Barceló (1976). *El Armamento Portatil Español (1764–1939), una labor artillera*. Madrid: Libreria Editorial San Martín.
- Skenneron Ian (1979–98). *Lists of Changes in British War Material in Relation to Edged Weapons, Firearms and Associated Ammunition and Accoutrements*. 5 vols. Margate: self-published.
- Skenneron, Ian (1994). *British Service Sword & Lance Patterns*. Small Arms Identification Series No. 6. Ashmore City: published by the author.
- War Office, UK (1869). *Cavalry Regulations*. London: HMSO.
- War Office, UK (1912). *Cavalry Training* (amended). London: HMSO.
- Wawro, Geoffrey (2003). *The Franco-Prussian War: The German Conquest of France in 1870–1871*. Cambridge: Cambridge University Press.
- Wielhorski, Janusz (1974). 'The Lance', in *Studia do Dziejów Dawnego Uzbrojenia i Ubioru Wojskowego*, Vol. VI: 78–108.

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